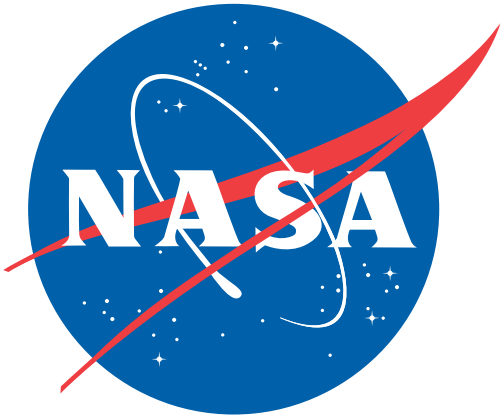
One NASA Recommendations

March 31, 2003



ONE TEAM, ONE JOURNEY, ONE NASA...
"Building the Future Together"

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Preface

NASA is viewed as one of the preeminent technological organizations in the world. That reputation has been achieved through more than 44 years of success. We have accomplished our success through outstanding collaboration, with thousands of individuals working together towards a common vision and goals. The One NASA effort is dedicated to ensuring that this critical characteristic of our culture is sustained as we continue into the future.

The One NASA effort was formally charted in July 2002, and the recommendations contained herein are intended to apply advanced organizational analysis and management thinking to enhance the ways we work together across the Agency. Like many large private and public corporations, NASA is an enormous multifaceted organization with thousands of employees and contractor teammates, numerous work sites, and hundreds of projects. Continuous improvement is a necessity to ensure that our strategic focus and work patterns take advantage of leading-edge management thinking. It is in the context of this type of strategic thinking and forward planning that this report has been initiated and prepared.

The findings and recommendations in this study will not astound or shock anyone experienced with the inner workings of large and complex organizations. In fact, many of the recommendations will be familiar to leadership within NASA, and some of the actions have already been started under the auspices of other continuous improvement efforts going on within the Agency.

However, the value of this study is to present a unified set of recommendations and a process for change that will propel NASA to new levels of achievement. The One NASA effort ultimately presents an opportunity for a renewed resolve throughout the Agency to work together as one family of people dedicated to meeting our significant challenges and extending our success for the benefit of all humankind. We must move to action with passion, commitment, and conviction…

As only NASA can.

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No pessimist ever discovered the secrets of the stars or sailed to an unchartered land or opened a new heaven to the human spirit.

—Helen Keller

Executive Summary

Overview

In July 2002, a team of NASA and contractor employees began working to assess the feasibility and define the action plan needed to create a more highly unified NASA organization. This effort has been called One NASA. Our goals have been to collect information and feedback through surveys and in-person discussions with NASA management and workers at all levels to determine key areas in which NASA can build upon its successes and achieve significant performance improvement. The team set out to formulate a set of specific recommendations for organizational and cultural change that would elevate NASA to a new level of effectiveness and performance.

Defining One NASA

One NASA involves implementing structures, policies, and procedures that enable all our people—managers, employees, and contractors—to operate as a single team in applying their many unique capabilities in the pursuit of NASA's Vision and Mission. One NASA aims to allow the Agency to accomplish more than the sum of its elements can accomplish today. The intent of this effort is to foster a more productive and higher-performing NASA that better leverages its skills and resources to make our programs more viable and successful.

One NASA is about better aligning our capabilities and resources with our Vision and Mission:

- It is about teamwork, collaboration, and working together.
- It is about creating a culture and environment of high performance, sharing, and respect.
- It is about working efficiently and smartly, with standardizations that free up more funding for science, research, and engineering.

Fundamentally, One NASA is about how we decide to do the challenging things we do and how we accomplish them together.

Background

To date, the effort to research and advance the concept of One NASA has involved the following:

- **Phase I,** from July 2002 to September 2002, initiated the effort to identify the fundamental issues, problems, and solutions needed to create One NASA.
- **Phase II,** from October 2002 to March 2003, continued the effort through extensive research, interviews, and surveys among NASA management and workers, and data analysis.

Recommendations

Based on the research and data collected in Phases I and II, this report proposes eight recommendations to achieve One NASA. The recommendations are organized according to a systems approach used to create the embedment or institutionalization of deep change in large organizations such as NASA. This approach targets multiple components of the organization's operations, such as leadership and management structures, cultural values, business practices, human resource systems, communications, and other elements of functionality, in order to effect sustainable, permanent change.

The recommendations are summarized in Table I. Each recommendation further involves a number of specific action steps required to bring the recommendation to fruition. These action steps are fully enumerated in the report.

Table I: Summary of the One NASA Recommendations.

1.	Vision, Mission, & Strategy	**Link the work of all employees to the Agency's vision, mission, and strategy.** Communicate the connections between our top-level Vision, Mission, and Strategy and the day-to-day work of each and every employee. **Benefits:** Enhances commitment and motivation by personalizing NASA's vision and mission.
2.	Leadership	**Identify and implement leadership accountabilities that support One NASA.** Identify a set of specific expectations for management and leadership behaviors that exemplify One NASA. Hold all leaders accountable to demonstrate these behaviors in their decisions and actions, especially in regards to fostering healthy competition. **Benefits:** Establishes strong role models for One NASA behaviors that become the norm within the NASA culture.
3.	Organizational Structure	**Review and modify organizational structures and roles to facilitate cross-Center/Agency collaboration.** Examine current formal organizational structure and informal roles/relationships. Create organization structures and/or realignment of roles and relationships that enhance collaboration and One NASA. **Benefits:** Aligns roles and relationships to expand and support more frequent and effective collaboration.
4.	Organizational Culture	**Revalidate and advance our common organizational values to build a unified culture.** Revalidate and advance our current Agency-level values as NASA's primary set of values to guide the way our Centers and contractors work together and the way we treat one another. **Benefits:** Provides everyone in the NASA family with a common and explicit basis for evaluating how their behavior aligns with NASA values.
5.	Human Resources	**Develop human resources strategies that serve to broaden the perspective of all employees within the NASA communities.** This broadening can be accomplished through emphasis on systems that create development opportunities that enhance perspectives, performance management, and rewards and recognition programs that support One NASA. **Benefits:** Strengthens NASA's talent pool by linking critical Human Resource systems to the goals and objectives of One NASA.
6.	Tools and Business Practices	**Increase NASA-wide cross-collaboration through common tools and business practices.** Enhance cross-Agency collaboration by putting in place common engineering and collaborative tools and databases, processes, and knowledge-sharing structures. These tools and methods need to enhance the ability to collaborate, reduce inefficiency, and create time and resources for collaboration. **Benefits:** Provides concrete tools and techniques to foster collaboration, resource savings, and efficiency.
7.	Communication	**Enhance current communication practices to promote a greater understanding of the capabilities within NASA.** Create an internal version of NASA's Public Relations capability to educate and inform all NASA employees about capabilities, achievements, and best practices across the Agency. **Benefits:** Increases and builds awareness about capabilities and talent across the Agency to foster greater collaboration.
8.	Measurement	**Measure progress and results from One NASA effort.** Augment current Agency-level measurement systems with new measurements that focus on the progress we are making on One NASA. Use multiple inputs including financial data, budget allocation, talent allocation, and employee and leader comments. **Benefits:** Tracks the progress toward One NASA and links the health of the cultural and collaborative changes to the overall health of NASA itself.

Implementation Plan

It is intended that the recommendations be implemented over a period of approximately two to three years. We foresee the implementation occurring in two additional Phases beyond Phases I and II:

- **Phase III: Implementation Planning**. Upon approval of this report and its recommendations from senior leadership, Phase III will commence to disseminate and share our findings and recommendations with the NASA and contractor communities. The goals of Phase III are to achieve a high level of exposure, commitment, and buy-in to the recommendations and the specific action steps needed to accomplish them. During this time, meetings and workshops will be conducted to discuss the recommendations and the specific action steps required to implement them. The specific planning needed to

implement each action-step will be conducted during this phase by the individual action sponsors.

- **Phase IV: Implementation.** During this phase, the individual action items are put into practice among managers, HR professionals, employees, and our industry partners. The results will be carefully tracked and measured to ensure that the intended changes are produced.

In addition, communication of the One NASA effort will be of utmost importance both within and outside NASA during the phases indicated above. We have compiled a complete communications and media plan to assist in this process, ensuring that the NASA community can remain informed of the significant progress the Agency is making toward our ultimate goal of One NASA.

Figure 1 illustrates the Implementation and Communication Plans.

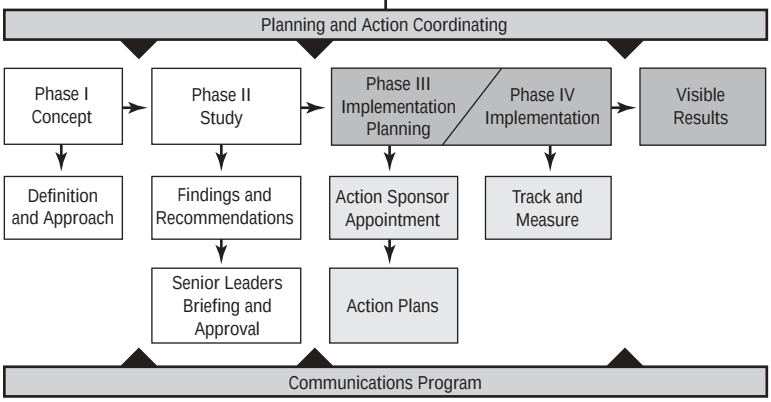

Figure 1. One NASA Implementation Process.

1.0 Introduction

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1.0 Introduction

Origins of the One NASA Effort

The concept of a unified NASA organization is not new. Over the past years and under several NASA Administrators, attempts have been made to address issues related to strengthening the collaborative capabilities among the many Centers and personnel within NASA and among our contractors. The One NASA initiative is a focused attempt at advancing this same concept. It is also powered by both a very strong desire of the current Administrator, Sean O'Keefe, and the concepts related to Freedom-to-Manage described in the President's Management Agenda.

Summary of Phases I and II

The One NASA effort was formally inaugurated in July 2002. To date, the work has passed through two phases of development.

Phase I: From July 2002 to September 2002, an initial One NASA Team of seven individuals from a variety of NASA Centers conducted discussions within the senior leadership ranks and with targeted employee audiences. The Team concluded that attaining a more unified NASA hinged on two key areas: teamwork and culture. The NASA Enterprise Committee provided overwhelming support for the One NASA concept and the Team's recommended approach to continue their work into a Phase II study.

Phase II: Between October 2002 and March 2003, the One NASA Team was expanded to include 22 people representing every NASA Center, JPL, and NASA HQ. The Team's activities focused on broadening the base of support for the initiative, as well as on collecting data and researching potential actions that would enable the Agency to achieve an enhanced level of unification vital to NASA's future success. Activities within this phase included:

- Extensive interviews with 26 of the Agency's senior leadership cadre.
- A NASA Update devoted to the topic and specifically aimed at engaging the entire NASA community of employees.
- A NASA employee-wide Web-based survey that measured commitment to the concept of One NASA, as well as feedback, ideas, and suggestions for improvement and change.
- A review of past studies and analysis within the NASA community for possible relevance to the One NASA goals.
- A literature search for best practices in creating cohesive and collaborative organizations.
- A benchmarking effort that focused on nine companies within the commercial sector who have undertaken similar change initiatives oriented toward teamwork and culture change.

Concerning the Web-based survey, it is important to note that the survey received input from 5,404 respondents representing every major demographic category in the NASA community. The representation of survey respondents among NASA categories was very similar to their representation in the entire NASA population (e.g., five percent of the survey respondents were at Headquarters versus six percent of the entire NASA community at Headquarters, and so on for every category). Hence it appeared that the survey respondents as a group were highly representative of the entire NASA community.

The survey contained both objective, measurable questions, as well as open-ended questions that allowed room for individual narrative comments. The 5,404 respondents provided more than 14,000 such comments. In general, both the objective portion of the survey and the comments indicated widespread support for the concept of One NASA.

Complete information about the research and data collection in Phase II, as well as the statistical analysis of the objective questions on the survey and the subjective comments are being separately published as Volume II in conjunction with this report. See the Appendix for details about obtaining Volume II.

Applying an Organizational Framework to the Data

The information gathered during Phase II was voluminous and therefore required a framework for analysis. It was determined that an applicable and meaningful framework could be found in a systems approach used for analyzing and implementing change in large organizations. Under this approach, the process to achieve significant, widespread, and permanent organizational change typically targets multiple components of an organization's operations. Such organizational change may encompass categories like leadership and management structures, cultural values, business practices, human resource systems, communications, and other elements of the organization's functionality. In order to initiate long-lasting change and weave it into the true fabric of an organization, all these systems must align to support change. This process is referred to as *institutionalization* or *embedment* in management literature.

Guided by this framework, the Phase II Team focused on eight areas of NASA operations to use in categorizing and applying the data. These eight areas are shown in Figure 1.1.

Developing the Recommendations and Action Steps

Once the above framework was chosen, the process for analyzing the data and condensing it into a clear set of recommendations and actions steps required several iterative passes. These are summarized as follows:

- Data from the web-based survey and from leadership interviews were analyzed by the Phase II One NASA Team.
- All of the 14,000 comments from the Web-based survey were read at least twice—once to sort the data into the categories of our framework, and once for content analysis in order to assess how to apply them within their category.
- Each of the categories was then reviewed again to analyze and detect strong themes running through the comments. Exceptional ideas that may not have fit into specific themes were also considered.
- Within each category, the themes were then rank ordered and prioritized based on frequency and other factors, such as the comment's potential impact to One NASA and its actionable orientation.
- Finally, additional consideration was given to suggestions that were received from other sources, such as direct emails to a One NASA Team member, as well as to benchmark studies, previous NASA studies on climate and culture, and the academic literature on management and change.

Ultimately, the team consolidated from all of the above the set of recommendations and action steps found in this report. These recommendations were organized into the eight areas shown below, in keeping with our systems approach to organizational change.

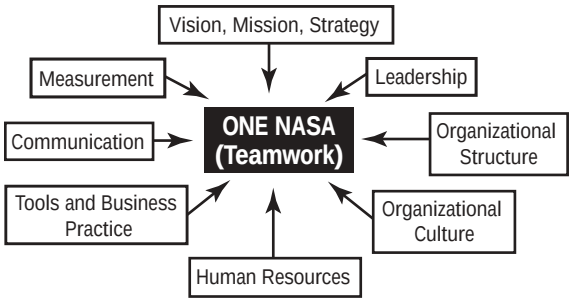

Figure 1.1. A Systems Approach.

2.0 Recommendations and Action Steps

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2.0 Recommendations and Action Steps

This section details the recommendations. For each recommendation, we present a list of suggested action steps to implement the recommendation. The action steps proposed here are not intended to represent a fully detailed or finalized plan. It is our expectation that they will need further discussion and finalization during later phases of the effort.

For each recommendation, we also present both a conceptual explanation of its significance from an organizational or management perspective and supporting comments reflecting on the data collected in Phases I and II concerning employee opinion. We also provide several direct quote testimonials from employees that exemplify the thrust of the recommendation.

We have made every effort to integrate the eight recommendations with change activities already underway within NASA to avoid duplication and to ensure that One NASA takes into account existing initiatives already underway. We also realize that some of the recommended changes may already be under discussion or in the process of being implemented.

In addition to the recommendations below, it is important to note that many additional excellent suggestions were proposed in the Web and executive surveys. Some of these focused on activities that are already ongoing, such as IFM, e-mail and badging, and, as a result, these are not included in this report. These suggestions have been forwarded to the appropriate party or organization within NASA for their consideration.

Recommendation #1

Vision, Mission, & Strategy

Link the work of all employees to the Agency's Vision, Mission, and Strategy.

Communicate the connections between our top-level Vision, Mission, and Strategy and the day-to-day work of each and every employee.

Action Steps

1a. Leader-led Workshops. Coordinate a series of leader-led workshops. These should begin with the senior leadership cadre and flow down to all employees. Use these workshops to align each individual's work to the Agency's Vision, Mission, and Strategy, and to our Strategic Planning Process.

1b. Reinforce in Performance Planning. Use the existing Employee Performance Planning Process so that each employee in every branch, division, and work unit understands how their work aligns with the Agency's Vision, Mission, and Strategy.

1c. Program Priorities and Resources. Ensure that all program/project priorities and resource commitments reflect and support the Agency's Vision and Mission. The Enterprise research strategies and the Program Commitment Agreements (PCAs) provide the forum to ensure that program priorities and commitments align the Agency's Mission and Vision as identified in the Strategic Plan.

1d. Selecting Competing Projects. Communicate to all levels how the process of selecting competing projects is done in the context of NASA's Strategic Plan and budget realities. Each employee should understand that the rationale for competition is for the Agency to achieve the best results with limited resources.

Rationale

This recommendation provides the basis for ensuring that all people in NASA's family understand how their work fits within the Agency's larger strategic context. The benefit of this recommendation is that it provides a solid foundation for collaboration by giving everyone a basis for working together toward a common goal.

Indeed, this recommendation and set of actions correspond to a wide range of literature in organizational behavior research that suggests that work on alignment of all levels and types of employees around the Vision, Mission, and Strategy of an organization is a critical starting point in change formulation and execution. In this context, NASA's Vision and Mission, as well as its Strategic Plan, provide a solid foundation for linking the work of all people in the Agency toward a unifying goal. Disseminating in clear ways the organization's Mission and Vision serves to foster a strong sense of being a contributor to our common goals and facilitates collaboration and cooperation by creating an understanding that all the parts of the Agency add to the whole.

In addition, this recommendation builds on what is known about how to make change effective at the individual level. Individual actions often are not predicated on simply knowing about the organization's Vision, Mission, and Strategy, but rather on being able to answer three critical personal questions: "What will I do differently?" "How does my role change?" and "What is in it for me?" Using these workshops to link the One NASA concept in concrete ways to the day-to-day work life of employees is thus a critical first step in achieving full employee buy-in to change.

Supporting Comments

A large number of respondents to the web survey reported that One NASA would be enabled by a greater

understanding of how their role and/or project aligns with the Agency's Vision, Mission, and Strategy. Some comments included:

- "*We need a consistent and coordinated strategy that ties working level projects to the Agency Strategic plan.*"
- "*Make our program priorities and resource commitments truly reflect our current Mission and Vision statements.*"
- "*We can be counted to unify around a genuine national need [and a] yearning for a common cause.*"

Based on this data, we expect that the actions indicated here can be critical in helping employees personalize the goals of One NASA and create opportunities for participation and buy-in through understanding how we all work toward common goals.

These actions can be easily linked to the Strategic and Performance Planning process already underway. The actions take the Employee Performance Planning process a step further by linking individual roles and projects directly to the Agency's strategy.

Recommendation #2

Leadership

Implement leadership accountabilities that support One NASA.

Identify a set of specific expectations for management and leadership behaviors that exemplify One NASA. Hold all leaders accountable to demonstrate these behaviors in their decisions and actions, especially in regards to fostering "healthy" competition and utilizing existing Agency capabilities.

Action Steps

2a. Model Behaviors. Create, articulate, and adopt models of specific One NASA behaviors for all levels of management. Communicate these to the management team through the Leader-led Workshops that will occur at each installation. Integrate these into the existing NASA Leadership Model.

2b. Management Tools and Guidelines. Create and provide tools and guidelines for managers, such as checklists, worksheets, and other practical tools that can be used by management to guide ongoing integration of One NASA behaviors into their decisions regarding resource allocation, facilities, program reviews, budget reviews, talent acquisition, and sharing of information.

Rationale

This recommendation proposes creating a set of agreed upon behaviors and decision-making tools that will make our leaders accountable for demonstrating One NASA behaviors during decision-making activities. Its benefits include role modeling One NASA behavior from all leadership levels in the organization.

Leadership behaviors set the standards in organizations. Management literature recognizes that organizations must establish a set of general guidelines and rules that proscribe the role of leadership in their workplace. Furthermore, leaders need to be held accountable for their behaviors, both formally (in performance reviews) and informally.

There are a number of areas that emerged from Web and executive surveys that could be used as a template for these behaviors. These include:

- Puts Agency interests ahead of Center and personal interests and agendas.
- Keeps the Agency-level common goals top priority.
- Links each person's role to the Agency's Vision, Mission, and Strategy.
- Encourages healthy and constructive competition between Centers to leverage the uniqueness of each Center.
- Leverages the use of talent from across the Agency on his or her programs and projects.
- Encourages broadening of employees' perspectives about the Agency through assignments, training, and rotations.
- Actively seeks assignments working at other Centers for his or her own development.
- Actively takes an Agency perspective when making decisions regarding resources, talent, and work allocation.
- Actively encourages teamwork across Centers.
- Encourages appropriate standardization of systems and processes across the agency to leverage resources and eliminate redundancy.

Supporting Comments

A number of respondents in the Web-based survey observed that even with top-level support of the principles behind One NASA, managers with primary interests in their own programs and Centers could prove to be major blocks

to the effort. There was concern around how to manage the tension between healthy competition for ideas and competition that is negative and destroys trust. Many reported support for the articulation of a common set of behaviors that could be adopted at each level of management to guide their role in embedding One NASA. Typical comments supporting this recommendation included the following:

- *"My immediate supervisor has the greatest ability to influence my migration to a One NASA mentality. If it is not a priority for him, it won't be for me."*
- *"…Managers give lip service to upper management and old methods continue unabated."*
- *"Having Centers compete for a mission is counter to One NASA philosophy…this promotes inter-Center rivalry, mistrust, and acrimony because the Centers must fight with each other for their funding."*
- *"What is the difference between good and bad competition?"*

Recommendation #3

Organizational Structure

Review and modify organizational structures, operational models, and roles to facilitate cross-Center/Agency collaboration.

Examine current formal organizational structure and informal roles/relationships.

Make appropriate changes to facilitate collaboration and optimize the use of NASA capabilities.

Action Steps

3a. Examine Formal Structures. Review and modify current formal organization structures. Examine current structures (e.g., Centers of Excellence and location of program offices) to identify those that impede cross-Center collaboration and/or create functional or geographic "stove pipes." Make appropriate changes to facilitate collaboration.

3b. Examine Informal Roles. Examine the informal roles and relationships within NASA and between NASA and its partners. Examine the operating relationships and information flows within NASA and between NASA and its external partners (such as projects with contractors and academia) to determine if changes are required to enhance One NASA behavior.

Rationale

Organizational structure and roles and relationships are a critical and visible aspect to organizational functioning. The benefit of this recommendation is ensuring alignment of structure and roles to the new One NASA objectives. Alignment means that reporting relationships and information flow foster collaboration and teamwork. Alignment also means that informal relationships are not at odds with enhanced teamwork and collaboration. Alignment can also be one of the most visible actions to show commitment to One NASA.

Pursuant to large-scale change in any organization, it is an appropriate time to consider whether the current structure, roles, and accountabilities facilitate the objectives of the initiative being pursued. Since structure, to a large extent, dictates relationships, communication flow, and resource allocation, the examination of NASA's organizational structure and roles and accountabilities with the objective of cross-organization collaboration is a critical aspect of the execution strategy for One NASA. One common deterrent to collaboration, for example, are so-called functional or geographic "stove pipes," wherein teams are restricted to performing only limited tasks, having little or no interaction with other teams, thus lacking the "big picture" of their organization.

We need to be mindful, however, that structural changes alone, without concomitant behavior and culture change, will do little to address the challenges associated with One NASA.

Supporting Comments

Many respondents provided thoughtful comments relating to NASA's organization and proposed a number of changes. Although many different solutions were offered, they were all aimed at the same broad issue: that the current organizational structure and roles should be modified and realigned to enhance the flow of work and cross-Center collaborative opportunities. One idea frequently offered focused on moving program managers to Headquarters to better balance and manage Center collaboration. Typical comments received relative to this recommendation included:

- *"Eliminate designating one Center as the COE for an activity: instead, have activities at each Center be called a 'contributor' to an area of work."*

- *"Allow other Centers to lead efforts typically reserved for particular Centers. NASA Centers typically get "stovepiped" in what they are doing. They claim an excessive amount of ownership."*
- *"Locate decision makers at HQ—eliminate the fighting between Center directors."*
- *"Although each Center has capabilities…all contribute to the success or failure of NASA programs…. Territoriality has developed over the years and should be discouraged as an impediment to NASA's missions."*
- *"As One NASA becomes a reality, our Center Directors will become institutional support personnel and everyone will work for the Programs."*

Recommendation #4

Organizational Culture

Revalidate and advance our common organizational values to build a unified culture.

Revalidate and advance our current Agency-level values as NASA's primary set of values to guide the way our Centers and contractors work together and the way we treat one another.

Action Steps

4a. Agency-level Values. Revalidate and advance our current Agency-level values (Safety, People, Excellence, Integrity) to reinforce One NASA. For example, specific consideration should be given to the inclusion of teamwork within those values. Once validated, the Agency core values should serve as the primary guide for overall operations.

4b. Program Values. Correlate programs to Agency values, showing how every program and project, as well as Agency change efforts such as IFM, Full Cost, NSSC, etc., use NASA values. Make showing this linkage a requirement for authorization of the program/project or initiative and integrate into the review process.

4c. Provide Values Tools. Provide values tools and decision-making guidelines. Give all levels of management concrete tools and materials that will encourage them to use NASA values in their everyday work in decision-making, resource allocation, human resource practices, contractor relationships, etc. Encourage managers to use these tools in staff meetings and other forums to discuss with employees how everyone will implement and live by these values. These tools will supplement the leadership behaviors described in Recommendation #2.

4d. Code of Conduct. Develop a code of conduct for interactions with contractors. Use NASA values for this code of conduct.

4e. Contractor Alignment. Align our values with the laws and policies for contractor and JPL workforces. Develop ways to enhance collaboration and teamwork with our contractors and JPL employees.

Rationale

Values are essential to guiding what is appropriate behavior in an organization. The benefit of promoting our common Agency-level values toward One NASA is that all people in the NASA family will have a common and explicit basis for evaluating how their behavior aligns or misaligns with its values. Values supplement and reinforce behavioral guidelines for One NASA behavior.

Fundamental to leading an organization that seeks to be aligned is the linkage of values and beliefs that allow the organization to achieve its Vision, Mission, and Strategy. This is especially important in a public agency whose function is, in part, focused on public service. This recommendation suggests that senior leaders need to define explicitly how our current organizational values support One NASA and their impact on decisions about sharing of resources, equal treatment of people, trust between Centers, impact of politics, etc.

We should note that, currently, many individual NASA Centers have a set of values they hold closely. These values have served each Center well and can be integrated into a broad Agency-level set of organizational values. However, it is critical that NASA uses common Agency-wide values, while holding Center values as supplemental and complementary.

Supporting Comments

Many comments in the Web-based survey addressed the contractor community and the need for them to be part of One NASA. A number of respondents also singled

out NASA's relationship with JPL as requiring attention. Clearly there are laws that dictate what we can and can not do with our contractors. However, behaviors toward contractors that are divisive, rude, or inappropriate create a "tier system" where contractors have a more difficult time contributing and participating to an equal extent. In addition, practices that serve to create a tier system in a culture that requires diversity of thinking and ideas might serve to inhibit innovation, creative thinking, and the free exchange of ideas. We need to not only align our values with our relationship with our contractors, but also examine how laws, regulations, and rules impact these interactions. Typical comments relative to this recommendation included the following:

- *"Need some rules of engagement that will not be violated when making tough decisions with limited resources and then holding others accountable."*
- *"Less Center-centric conversations and more NASA-centric conversations (cultural measure)."*
- *"The pursuit of One NASA is more cultural in nature and will be somewhat more difficult to measure. You will know it when you see it."*
- *"NASA attitude toward support contractors—a lot of the NASA civil service personnel still consider and treat support contractors as 'second class citizens' rather than team members."*
- *"NASA contractors are treated as second class citizens."*
- *"Contractor vs. civil servant—contractors on most Centers are made to feel like second or third class citizens. This is not a universal attitude but is very prevalent."*

Recommendation #5

Human Resources

Develop human resources strategies that serve to broaden the perspective of all employees within the NASA communities.

This broadening can be accomplished through emphasis on systems that create development opportunities that enhance perspectives, performance management, and rewards and recognition programs that support One NASA.

Action Steps

5a. Develop Broadening Strategies. Such strategies include increasing the availability of Agency-wide training and detail assignments. They might also encompass short-term experiences such as formal Center visits and shadowing assignments, midterm rotations (3–6 months) on special Agency-wide assignments, personal exchange programs, and long-term programs such as the SESCDP. Broadening strategies should be key elements within the succession planning process and included within targeted Individual Development Plans for all employees at the GS–11 through the SES level.

5b. Open Vacancy Advertisements. Ensure that the hiring of personnel can come from an "Agency pool" of employees versus just a "Center pool" of employees. Leverage the existing STARS/Resumix Program to do this while eliminating process barriers associated with permanent transfers.

5c. Resolve Inconsistencies. Examine and address inconsistencies in promotion practices across Centers, such as the inconsistent use of promotion boards across the Agency to determine promotion eligibility; promotion criteria such as the commitment to Agency values, diversity, and One NASA; and consistent use of NASA's job classification system.

5d. Require SES mobility. Require senior-level personnel to have worked for a significant period of time, such as six months, at more than one Center and at HQ before selection into SES Corps, or require rotation within a specific period of time after assignment to the SES Corps (in the case of external hires).

5e. New Employee Orientation. Develop and offer an Agency-level orientation for all new employees. This would include an Agency capability brochure that discusses each Center and how each Center fits within the overall Strategic Plan.

5f. Incentivize Employee Mobility. Abandon the negative consequences to managers who foster increased mobility for their employees such as current FTE limits at the Center level and limitations on travel resources.

5g. One NASA Performance goals. Include in all SES Corps and employees a need to have performance goals relating to a One NASA objective.

5h. Peer Award Programs. Reward ground-breaking individual or team efforts at One NASA behaviors and cross-Agency collaboration through a variety of new peer award methods, including spot awards and so on.

5i. Consistency of Rewards. Ensure consistency of rewards and recognition programs across Centers.

5j. Broaden SES Selection Panel. Require each SES selection panel to include one member from another installation.

Rationale

The benefit of this recommendation is that it links critical human resources (HR) systems to fulfilling the goals and objectives of One NASA. HR policies are pivotal to the success of organizational change. It is a common saying in organizational psychology that you get the behaviors you reward. On this basis, it is evident that we must design HR systems that foster a sense of teamwork, collaboration, and the sharing of ideas and resources.

This recommendation especially focuses on creating systems and processes that promote the broadening of work opportunities and the elimination of barriers associated with seeking or participating in Agency-wide assignments. It targets increased and enhanced visibility of mobility assignments, which was mentioned as a primary barrier to broadening the perspectives of our employees. Finally, it calls for an examination and revision of the way we reward and recognize employees and managers to reflect an emphasis on One NASA.

In addition, inclusion of management, leader, and employee behaviors that foster One NASA in the yearly performance review process would further solidify the emphasis on a single NASA team operating under one shared vision. This process has already been initiated at some Centers.

Supporting Comments

While many Web-survey respondents recognized that greater mobility was beginning to occur at the top levels of the Agency (Associate Administrators, Center Directors, etc.), there was strong concern that mobility opportunities do not migrate down to all of the career levels within the Agency. The primary barriers to achieving this recommendation as stated in the findings are the business practices in place within the Agency. These include budgeting procedures that focus management of FTEs at the Center level and lower, limitations on relocation funding and travel (and that all too often limit the publication of vacancy announcements to the Center level) and a lack of centralized communications capability for all open vacancies.

In addition, there were a number of comments regarding inconsistent practices and inequities in promotion practices across Centers. These inconsistencies, whether real or perceived, inhibit the achievement of a more unified NASA by creating further inequities between employees performing similar functions for different Centers. As a result, our recommendation focuses on addressing inconsistencies in promotions or other areas that might be contributing to a lack of support for the One NASA concept.

A number of respondents to the Web-based survey and senior interviews suggested that specific rewards and recognition of One NASA performance should be added to the existing rewards structure via the formal performance review process and informal reward mechanisms. Given the fact that data from the recent internal NASA review showed that peer awards are valued more than organization awards, a peer award program should be implemented within each major NASA organization.

Typical comments supporting this recommendation were as follows:

- *"Seek some level of balanced mobility that includes middle management and other potential leaders (GS–12/13/14). This may be in the form of actual mobility to another Center or HQ, while also including more mobility within a Center. This element should also include wider participation on Agency-level teams at each Center."*
- *"We need cross training—no one should become an AA or Center director unless they have spent more than 12 months at another Center."*
- *"Actively promote service time at multiple Centers as a requirement for senior management positions."*
- *"Make it easier and desirable for staff to work at multiple Centers."*
- *"Reward the behavior you wish to encourage."*
- *"Specific rewards for individuals, groups, and Centers by passing personal gain for the overall good of the agency."*
- *"Promote and reward those NASA employees who best embody the spirit and vision of One NASA."*

Recommendation #6

Tools and Business Practices

Increase NASA-wide cross-collaboration through common tools and business practices.

Enhance cross-Agency collaboration by putting in place standard engineering and collaborative tools and databases, processes, and knowledge-sharing structures. These tools and methods need to enhance the ability to collaborate, reduce inefficiency, and create time and resources for collaboration.

Action Steps

6a. NASA-wide Directory. Create an Agency-wide Directory, not Centerwide, that contains current information on name, title, expertise, organization, location, phone number, e-mail address, etc.

6b. Encourage Virtual Teams. Institutionalize methods and tools for working in virtual teams across Centers. Encourage increased cross-Center work by including greater access to video conferencing, teaming rooms, collaborative workstations, etc.

6c. Catalog Technical Assets and Capabilities. Establish a searchable electronic catalog of technical assets across the Agency—engineering facilities, research facilities, test facilities, tools, expertise, etc.

6d. Review Common Databases. Assess the current state of databases, such as the Life Sciences Data Archive, for their ability to span multiple NASA Centers. Recommend adoption of common databases as appropriate. Develop a plan to increase awareness of databases and to provide database-specific guidelines for use.

6e. NPD and NPG Pilot Project. Select a small number of current NPDs and NPGs that typically have derivative directives and guidelines at the Center level. Assess the impact of elimination of the derivative documents. Assess what modifications would be required to the Agency-level documents in order to eliminate the Center-level derivatives.

6f. Knowledge Management System. Establish a formal Knowledge Management (KM) pilot project, in which KM communities of practice (COPs) can occur for a small set of engineering, research, and administrative specialized disciplines that span multiple NASA Centers —for example, thermal test engineers. Identify and train these COPs in KM principles of operation.

6g. Engineering Design Tool Study. Assess the benefits, risks, and implementation costs of moving to a common set of engineering design standards and common tools—for example, CAD/CAM tools.

6h. Collaborative Engineering Environment. Assess the feasibility of implementing a collaborative engineering capability that spans all Centers by leveraging the unique skills and capabilities of each, while creating a bridge that allows engineers and engineering tools to communicate between Centers.

6i. Streamline Funds Transfer. Implement a process to streamline the inter-Center transfer of funds for the purpose of enhancing technical collaboration among Centers.

6j. Standardize Research Announcements. This includes the guidelines for full cost accounting and management to include the definition of content within any given pool, the use of full cost service rates and skill rates, and its use within any NRA solicitation.

6k. Program/Project Management Improvements. Improve 7120 and its implementation across NASA to increase accountability for requirements, standardize reviews and processes, and tailor processes for research, technology development, and space flight projects. Improve the program/project management environment to foster collaboration between Centers.

Rationale

The benefit of this recommendation is that it provides concrete and usable tools and techniques that are accessible to all employees, which foster increased collaboration, resource savings, and greater efficiency. These actions are very visible to the workforce and some easy to implement relative to long-term cultural change. While culture, behavior change, communication, and HR practices provide the foundation for effective collaboration at a fundamental level, more effective collaboration tools and business practices will enhance the probability of success at the working level. Much of this recommendation is tied into encouraging and facilitating the transfer or sharing of knowledge and enhanced communication. Collaboration and teamwork require open access to knowledge, standardized tools for accessing it, and robust systems on which to store it.

Supporting Comments

Typical comments supporting this recommendation included the following:

- *"Common database of specialists—From a technical perspective, it is often difficult to locate groups or individuals by specific specialties at the various Centers. A common database of the focus of various working groups would make it much more efficient to find appropriate contacts, etc."*
- *"Collaborative Engineering—enables models/ simulations at various Centers to communicate and exchange data/results."*
- *"Cross-institutional Design Capability—concurrent spacecraft and component design methodologies should be NASA-wide architecturally so that collaborations are inexpensive and efficient."*
- *"Large companies often have their employees use common tools so that work strategies and practices unify. Project Management is the lowest common denominator for work integration." "All centers have common reviews and yet these reviews are conducted in a different way."*

Recommendation #7

Communication

Enhance current communication practices to promote a greater understanding of the capabilities within NASA.

Create an internal version of NASA's Public Relations (PR) capability to educate and inform all NASA employees about capabilities, achievements, and best practices across the Agency.

Action Steps

7a. Public Relations Capability Within. Develop and implement an internal communications capability within NASA to better educate employees on the capabilities and achievements within the community.

7b. Use Technology to Communicate. Create space on the NASA homepage for ongoing posting of information on projects at all Centers, as well as examples of cross-Agency collaboration.

Rationale

This recommendation is not aimed at communications or PR about the progress toward One NASA, but rather at facilitating communication within NASA. The need for greater collaboration suggests that people need to communicate easily. This requires some tools and technologies to facilitate that. However, this recommendation does not seek to create a new Code or organizational structure. Rather, it would reorient the role of PR to have an internal component.

Clearly one of the greatest barriers to collaboration is lack of awareness of the capabilities and talent across the Agency. In fact, one of the underlying themes that emerged from Phases I and II was that increased collaboration across organizations would be enhanced by increased knowledge of capabilities that other installations possess.

Furthermore, this recommendation calls for other actions such as providing the workforce, via regular NASA-wide communication vehicles such as the NASA Web site, newsletter, etc., information about each Center, their strengths, current projects, and contributions to the Agency Vision and Mission.

Supporting Comments

A common theme in data collected from the NASA workforce was the need for better communications inside NASA regarding a number of topics such as NASA's Vision and Strategy and the capabilities and achievements across the Agency. We are recommending that we reconsider the role of public affairs to include a responsibility that targets internal communication with the rigor that it uses for external stakeholders.

Typical comments supporting this recommendation included:

- *"Clear and consistent communication throughout the NASA workforce that is followed by consistent actions."*
- *"Leadership must demonstrate a long-term commitment to One NASA lest it fail as other Agencywide efforts towards change have previously done."*
- *"Top management attention, focus and communication are key to One NASA."*
- *"Advertise those capabilities that are available to us around the Agency to truly work in a more collaborative environment."*
- *"Public Affairs system at NASA should revolve around One NASA rather than 10 Centers. We need to promote those things we are trying to accomplish from an Agency perspective."*

Recommendation #8

Measurement

Measure progress and results from One NASA effort.

Augment current Agency-level measurement systems with new measurements that focus on the progress we are making on One NASA. Use multiple inputs including financial data, budget allocation, talent allocation, and employee and leader comments.

Action Steps

8a. Implement Top Sheet. Implement the use of a NASA top sheet that measures key Agency performance parameters for continual review and line of sight for senior leaders.

8b. Measure Progress Toward One NASA. Augment the current Agency-level measurement systems to assess movement toward One NASA. Include an overall organizational measure on NASA's top sheet. Integrate One NASA measures into current climate and culture studies at the Agency and Center levels. This action would be supported and supplemented by metrics defined within the individual actions of the preceding recommendations.

Rationale

Any good organizational strategy requires a measurement system that targets progress and results. We therefore recommend that we augment current measurement systems to target two types of measures:

- Process measures that measure progress on each of the recommendations adopted. The development of these measurements will be finalized in the course of Phase III of the implementation plan.
- Results measures that measure progress toward One NASA. These measures include multiple sources of data such as financial indicators, employee and leadership comments, talent allocation, etc. They also include indicators of culture and climate. Note: During our Phase II efforts, we examined previous NASA studies on culture, customer satisfaction, employee climate, and other topics. One of the things that struck hard was that although many of these studies off-handedly commented about the lack of cooperation and sharing across Centers, there was not an explicit focus on the measurement of how well the Agency is doing on working together collaboratively toward the common good.

The benefit of this recommendation is that it effectively links One NASA progress to the assessment of NASA's general health as an organization. For this reason, we recommend that the overall One NASA measure be incorporated into NASA's top sheet to facilitate senior leader focus and attention. A top sheet is a high-level set of measures that reflect a balanced combination of financial, programmatic, and other measures that can be used to regularly examine the health of the organization. Top sheets are derived from lower level measures and reflect the organization's strategy and points of emphasis. Top sheet information should be reviewed by the Enterprise Committee on a regular basis.

3.0 Implementation Plan

ONE TEAM, ONE JOURNEY, ONE NASA...
"Building the Future Together"

3.0 Implementation Plan

This report represents months of thoughtful reflection on NASA's future by current employees and leaders alike. For all that has been accomplished, the simple truth is that the heavy lifting to make it happen is still ahead. Implementing One NASA will require time, hard work, and many tough decisions. This plan lays out our approach to implementing the recommendations. We foresee two further Phases in order to achieve One NASA, as shown in Figure 3.1.

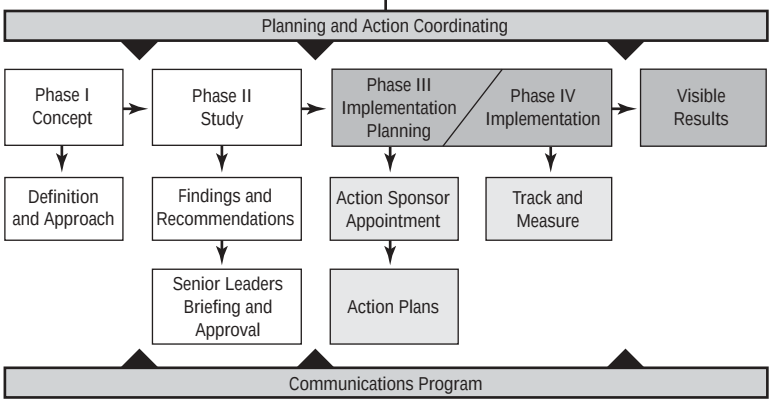


Figure 3.1. One NASA Implementation Process

This section also includes a preliminary assignment of leader/organization accountability for action planning and a statement of requirements for action plans that will be developed for each recommended action. We have also considered the priority and phasing of actions to assure that all actions can be accomplished without overburdening an already busy NASA workforce. It should be emphasized that the tables in this section that assign action accountability and priority represent preliminary efforts and that they will be revised as the final, detailed action plans are developed.

Phase II Completion

Upon approval from senior NASA leadership for this report and its recommendations, Phase II will be considered completed. This process will involve face to face debriefs with senior leaders and with action sponsors to build a consensus around the implementation of report recommendations and actions. Due to the broad impact of the recommendations, these discussions will continue into Phase III.

Phase III: Implementation Planning

Phase III will begin following approval from senior NASA leadership for this report and its recommendations, Phase III involves three goals:

1. Disseminate One NASA Plans and Obtain Buy-in

NASA employees and our industry partners need to be informed about the results of Phases I and II of the One NASA effort. It is also important to let them know that their concerns and comments were utilized in the development of the recommendations.

We therefore propose that Phase III begin quickly with an Administrator's update that discusses the results. The next step should be a series of Leader-led One NASA briefings, in which the data and conclusions from Phase II are presented and shared with employees at all levels within NASA, as well as with our contractors. The goal of such briefings is to increase the opportunities for commitment and buy-in from everyone.

2. Identify Implementation Leadership and Sponsors

Phase III will continue the process of building a network of leaders and sponsors to advance the One NASA effort. The following key leadership roles will be required.

- Executive Sponsor: Implementing One NASA will require active leader involvement. We therefore recommend that, early in Phase III, an Executive Sponsor should be named. This person should be a current member of the Enterprise Committee (EC)

and will become accountable for spearheading the entire One NASA effort throughout NASA. This individual will serve a coordinating function to integrate the implementation of all recommended actions. This leader will also be an ongoing advocate and visible promoter of One NASA principles and actions, will be responsible for tracking progress toward action results, and will manage the One NASA communications program as laid out in the Communications Plan in Section 4 of this Report.

- One NASA Team. The One NASA team approach has been effective in Phases I and II, and we recommend extending it into Phases III and IV. The members should have a broad perspective and be a recognized entity within an installation. The Phase III Team members should continue to be representative of all Centers, HQ, and JPL. The Team will support the Executive Sponsor in overseeing and facilitating the implementation process, including plan integration, action tracking, results measurement, and communications. In addition, they would be accountable for working on any materials associated with the execution of the effort at their respective Center.
- Action Sponsors. We recommend an action sponsor be selected for each action step. These individuals will assume accountability for managing the execution of a specific action step and guiding the preparation of detailed plans and resources needed to achieve specific milestones and include measurable metrics. They would work with the One NASA Team to ensure that the development of materials and processes align with functional efforts associated with other ongoing actions.

3. Prepare Action Plans

It is intended that the Action Sponsors continue the work initiated in Phase II, particularly relative to finalizing the action plans supporting each recommendation. We envision the action plans to be formal documents that can be coordinated across organizations and that facilitate the measurement of progress. Action plans should include the following:

- Fully describe the action end state, goals, and benefits.
- Identify specific key milestones and schedules.
- Identify a responsible organization or individual to be involved in implementing the action plan.
- Identify supporting and/or constraining actions in other organizations or initiatives.
- Estimate the required budget for implementation.
- Identify critical decisions or approvals required to complete implementation.
- Develop metrics to assess progress and reporting milestones.

Table 3.1 represents our initial assignment of action accountabilities and schedules. The contents of this table are considered to be preliminary and will be revised as detailed action plans are developed. A key focus of action planning is to maximize the number of "quick victory" actions. Current categories for "quick victory" changes —where visible results occur quickly—are highlighted in gray on this table.

Table 3.1. Preliminary Implementation Plan table

Recommendations and Actions	Preliminary Implementation Schedule					Action Sponsor*	Action Organization*
	Apr-Jun 2003	Jul-Sept 2003	Oct-Dec 2003	2004	2005		
1. Vision, Mission, & Strategy							
1a. Leader-led Workshops						Code AD/Fred Gregory	Enterprise AAs and Center Directors, Directors of
1b. Reinforce in Performance Planning						Code F/Vicki Novak	Enterprise AAs and Center Directors, Directors of, and all Supervisors
1c. Program Priorities and Resources						Code AD/Fred Gregory	Executive Committee, Joint Strategic Assessment Committee (JSAC), Code AE, Code B
1d. Select Competing Projects						Code AD/Fred Gregory	Executive Committee, JSAC, Code AE, Code B
2. Leadership							
2a. Model Behaviors						Code AD/Fred Gregory	Enterprise AAs and Center Directors, Directors of, all Supervisors and Agency Lead for Change Management
2b. Management Tools and Guidelines						Code AD/Fred Gregory	Enterprise AAs and Center Director's, Directors of, all Supervisors and Agency Lead for Change Management
3. Organizational Structure							
3a. Examine Formal Structures						Code AD/Fred Gregory	Executive Committee
3b. Examine informal roles						Code AD/Fred Gregory	Enterprise AAs, Center Directors, Directors of, and Supervisors
4. Organizational Culture							
4a. Agency-level Values						Code AD/Fred Gregory	Enterprise AAs, Center Directors, Directors of, and Agency Lead for Change Management
4b. Program Values						Code AD/Fred Gregory	Executive Committee, JSAC, and Agency Lead for Change Management
4c. Provide Values Tools						Code AD/Fred Gregory	Executive Committee and Agency Lead for Change Management
4d. Code of Conduct						Code H/Tom Luedtke	Enterprise AAs and Center Directors, Directors of, all Supervisors, Code F, and Code H
4e. Contractor Alignment						Code H/ Tom Luedtke	Enterprise AAs and Center Directors, Directors of, all Supervisors, Code F, and Code H
5. Human Resources							
5a. Develop Broadening Strategies						Code F/Vicki Novak	Code AI, Enterprise AAs and Center Directors, Directors of, all Supervisors
5b. Open Vacancy Announcements						Code F/Vicki Novak	Code F and Agency HR Directors
5c. Resolve Inconsistencies						Code F/Vicki Novak	Code AI and Institutional Committee
5d. Require SES mobility						Code AD/Fred Gregory	Code AI, Enterprise AAs, Center Directors and Directors of
5e. New Employee Orientation						Code F/Vicki Novak	Code AI, Code F and Agency HR Directors

***Preliminary Assignment. Specific changes to NASA Program Directives (NPDs), NASA Strategic Plan, and agency budget documents to be determined by lead organization or management official.**

Table 3.1. Preliminary Implementation Plan table (continued)

Recommendations and Actions	Preliminary Implementation Schedule					Action Sponsor*	Action Organization*
	Apr-Jun 2003	Jul-Sept 2003	Oct-Dec 2003	2004	2005		
5. Human Resources-cont'd							
5f. Incentivize Employee Mobility						Code AD/Fred Gregory	Code AI, Institutional Committee, and Code F
5g. One NASA Performance Goals						Code F/Vicki Novak	Enterprise AAs and Center Directors, Directors of, and all Supervisors
5h. Peer Award Programs						Code AD/Fred Gregory	Enterprise AAs and Center Directors, Directors of, all Supervisors Code F
5i. Consistency of Rewards						Code AD/Fred Gregory	Enterprise AAs and Center Directors, Directors of, all Supervisors, Code F
5j. Broaden SES Selection Panel						Code AD/Fred Gregory	Code A, Enterprise AAs, and Center Directors, Code F
6. Tools and Business Practices							
6a. NASA-wide Directory						Code AO/Paul Strassman	Chief Information Officer and Agency CIOs
6b. Encourage Virtual Teams						Code AO/Paul Strassman	Chief Information Officer and Agency CIOs
6c. Catalog Technical Assets and Capabilities						Code AT/Dr. Michael Greenfield	Chief Engineer
6d. Review Common databases						Code AT/Dr. Michael Greenfield	Chief Engineer and Agency CIOs
6e. NPD and NPG Pilot						Code AT/Dr. Michael Greenfield	Chief Engineer and Center Systems Management Office (SMOs)
6f. Knowledge Management System						Chief Engineer/Theron Bradley	Chief Engineer and Center SMOs
6g. Engineering Design Tool Study						Chief Engineer/Theron Bradley	Chief Engineer and Center SMOs
6h. Collaborative Engineering Environment						Chief Engineer/Theron Bradley	Chief Engineer and Center SMOs
6i. Streamline Funds Transfer						Code B/Steve Isakowitz	Code B and Agency CFOs
6j. Standardize Research Announcements						Code AI/James Jennings	Enterprise AAs, Center Directors, Code B, and Code H
6k. Program/Project Management Improvements						Chief Engineer/Theron Bradley	Chief Engineer and Center SMOs
7. Communication							
7a. Public Relations Capability Within						Code P/Glenn Mahone	Agency Public Affairs Officers
7b. Use Technology to Communicate						Code P/Glenn Mahone	Agency Public Affairs Officers and Agency CIOs
8. Measurement							
8a. Implement Top Sheet						Code AD/Fred Gregory	Executive Committee
8b. Measure Progress toward One NASA						Code AD/Fred Gregory	Executive Committee and Agency Lead for Change Management

***Preliminary Assignment. Specific changes to NASA Program Directives (NPDs), NASA Strategic Plan, and agency budget documents to be determined by lead organization or management official.**

In assigning the above accountabilities, we took into consideration that the prioritizing and phasing of actions had to ensure that One NASA work could be accomplished without overburdening an already busy NASA workforce. Since the recommendations are spread out among a number of action sponsors and organizations, all of the recommendations in this report can be implemented while at the same time maintaining a manageable workload within each organization.

Phase IV: Implementation

Phase IV represents the implementation of each action plan. However, as illustrated in Figure 3.1, Phases III and IV are highly interactive and action dependent. Some actions may require little Phase III planning and move quickly into Phase IV implementation. For example, some "quick victory" actions can occur immediately, as their planning and implementation may require less than a year to complete. Other actions may require a long planning period and take years to implement. Changes in values and behaviors and some business tools and practices (Recommendations 2, 4, and 6) are examples of actions requiring longer implementation times.

Measurement of Results

Organizations must measure what they set out to achieve. As Recommendation #8 discussed, Phase III must therefore establish two sets of measures:

1. Process measures are those that determine how well we are doing on implementing the recommendations from this report.
2. Results measures are those that have to do with measuring NASA's progress and accomplishments in moving toward ONE NASA.

All measures will need to be defined by the Action Sponsors during Phase III and approved by the Executive Sponsor. We recommend that these measures be integrated into, and measured through, the strategic planning process. Such measures should be internally and externally focused to include not only employee and leader perspectives of our movement toward One NASA and internal process measures such as resource leverage, but also external measures of success. They should also consider partner, contractor, White House, and Congressional perspectives.

4.0 Communication Plan

ONE TEAM, ONE JOURNEY, ONE NASA...
"Building the Future Together"

4.0 Communication Plan

In addition to the recommendations and implementation plans, the Phase II Team prepared a communications plan that lays out a comprehensive program focused specifically on One NASA. This plan addresses both the nature of the communication messages and the methods or media to deliver them. The overall goals of this plan include:

- To provide continuous visibility to the NASA and contractor workforces regarding overall progress toward achieving One NASA.
- To educate the NASA workforce about One NASA and what they can do to facilitate its implementation in how they uphold its values, behaviors, and best practices.
- To highlight early results, as they happen, that powerfully demonstrate short-term "quick victories" as well as progress towards long-term challenges and changes that are beginning to occur within the Agency due to our One NASA efforts.
- To facilitate an ongoing dialogue among the NASA/ Contractor workforce regarding progress and additional recommendations for One NASA.

It is important to distinguish between two aspects of communications: communications about the progress of One NASA implementation and communications about the capabilities, achievements, and best practices across the Agency. This section focuses on communications about the progress toward achieving One NASA, whereas Recommendation 7 on Communication covers improving the internal communications within NASA to increase awareness of capabilities and resources.

The Importance of Communication

A consistent theme throughout organizational change literature stresses the importance of good communication. Benchmarking of other organizations implementing widespread organizational or cultural change indicates that good communications is a significant factor in their success.

The need for a comprehensive communications program was fully supported by the survey data collected in Phase II. This data revealed that a majority of the respondents did not know much about One NASA. Only 22 percent of the respondents knew more about the concept than the information available on the One NASA web site. As a result, it is critical to initiate and maintain a broad-based One NASA communications program throughout Phases III and IV. To that end, a highly integrated approach should be used as a communication carrier for progress on the One NASA effort. This approach should promote overall awareness among three targeted platforms to include the Leadership cadre, the employee community, and NASA's external stakeholders. This integrated approach is depicted in Figure 4.1.

Three Types of Communications Messages

In order to create and maintain cultural change and a "top-of-mind" presence, One NASA will have to depend on a constant stream of reinforcing communications that keep its concepts and accomplishments on center stage—in front of the internal NASA and contractor community.

In particular, significant organizational change often calls for multiple types of communications messages, especially when change is phased in over an extended period of time. Communication elements need to be selected for their ability to carry different messages and to reach different organizational levels. As a result, a critical aspect of this communication plan is to recognize three key types of communications messages:

1. Commitment-driven Communications

NASA leadership is in agreement on the importance of One NASA to the Agency's future. However, our study uncovered a significant degree of skepticism regarding

leadership's willingness to commit to fundamental and lasting change, especially change that takes years to implement. In addition, while a very high percentage of survey respondents are in full support of the concepts behind One NASA, many in the survey were skeptical and even fearful that One NASA will become the "flavor of the month" management program, reflecting their past experiences such as TQM. Skepticism is at times warranted and can be healthy when used to maintain focus on a worthy objective.

Senior leadership and middle management alignment about One NASA, coupled with strict attention to the consequences of setting appropriate expectations about expected results and not "overpromising," are thus an essential part of achieving the One NASA objectives. The communications plan should help establish realistic expectations for One NASA and minimize skepticism in the workforce.

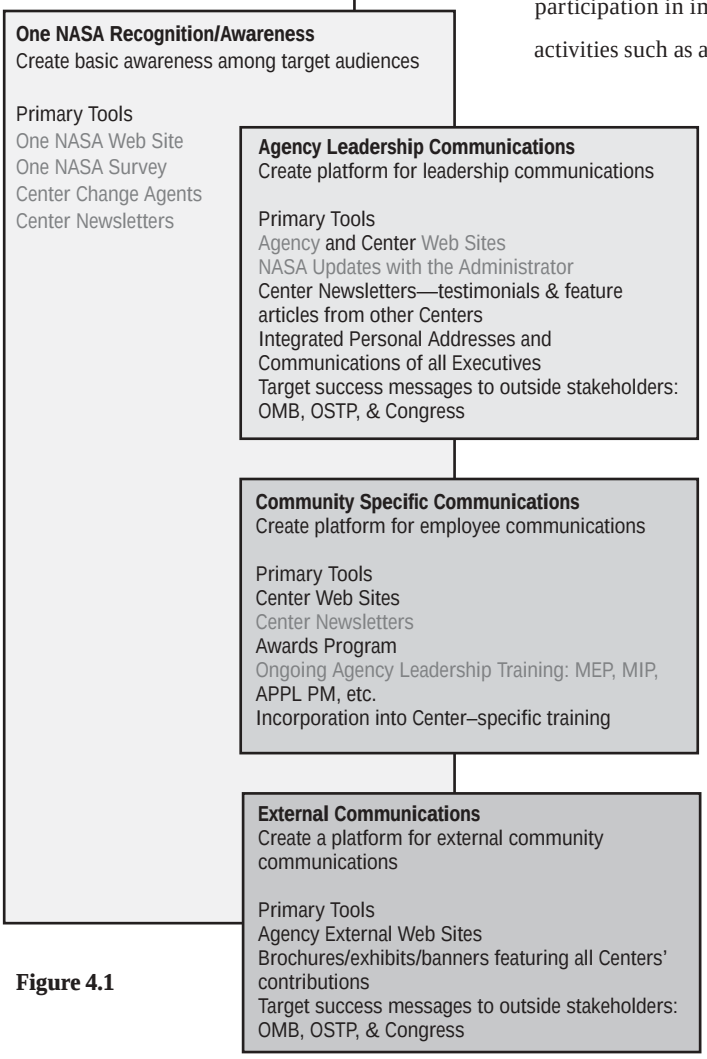


Figure 4.1

It is therefore important that, during the early stages of implementing the recommendations contained in this report, most likely before any results are even visible, an extensive segment of our communications plan needs to present messages that convey the commitment of Agency leadership. This can be accomplished through a combination of high visibility pronouncements of leader support for the goals of One NASA (such as by the NASA Administrator and Enterprise and Center leaders) and visible participation in implementation-related activities such as action planning and assignment of accountability for results. During this early stage, the messages of commitment can be further reinforced by real examples of past and current One NASA behaviors identified during our study.

2. Achievement-driven Communications

Following the above commitment-oriented stage of communications, our second communications focus can shift to informing NASA employees and the public about actual and real results achieved through the implementation of One NASA actions. Such achievement-driven communications might include status reports by Agency leadership on selected high-interest or high-impact changes made within the Agency, announcements of the completion and roll out of implementation plans, and widely publicized events leading to action completion.

Achievement communications need to focus on the meaning and importance of the change in order to impart the significant benefits that One NASA has on a personal level to each and every employee.

3. Behaviors-driven Communications

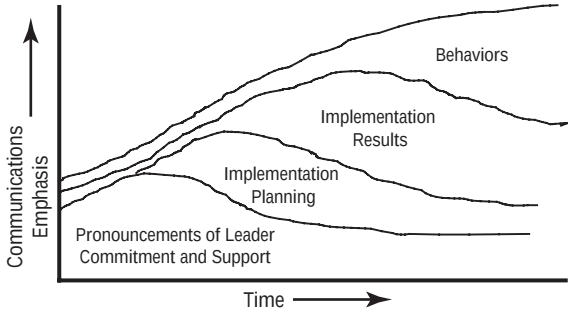
As implementation proceeds, communication emphasis can further shift to portray examples of leader, manager, and employee behaviors—that is, examples of "walking the talk," as it is called in management literature. An important recommendation relevant to this is that people at all organization levels need to engage in conversations about the types of behaviors that exemplify One NASA. This report contains a candidate list of behaviors, developed from the results of our study, to serve as a starting point for these conversations. The outcome of these conversations over time will help create a more clearly defined set of One NASA behaviors that will slowly become accepted as the norm by people at all organization levels. Perhaps more important than the behaviors themselves will be what they make possible—the implicit and explicit expectation that all people will be mutually accountable to engage in these behaviors and the associated ability to make judgments about behavior appropriateness in a One NASA culture.

Along with the development of behavior norms will be a parallel and reinforcing effort to identify and recognize employees whose behaviors currently exemplify One NASA. The starting point for such a recognition program is grounded in the results of the Phase II survey where respondents named people who currently exhibit One NASA behaviors. Such behavior-driven communications can start quickly by publicizing these best practices and eventually expand to report on the evolution of One NASA behavior norms and the people who practice them.

While the day-to-day behaviors of all NASA employees will be the most effective means of communicating progress towards achieving a One NASA culture—actions speak louder than words—other media and peer award programs, an important recommendation in this report, will also be used. Indeed, a critical source of news stories can be the One NASA rewards and recognition program. This will be a robust program using a range of recognition strategies including spot awards and more formal periodic awards. The program will make maximum use of peer award processes because peer awards are more respected by NASA employees.

Figure 4.2 depicts the phased time nature and ongoing mix of this three-pronged communications program.

Figure 4.2. Timeline of the Communication Plan



Communications Media Integration

The proper mix of communications elements (meaning the message carriers or media) is essential to success during the One NASA implementation in Phases III and IV. It is important that a variety of communications elements be used to deliver the appropriate messages to our target audiences in the most optimal manner, while allowing each media element to reinforce every other. This plan therefore recommends the use of a wide range of media, both formal and informal. The Communications Plan also needs to utilize both high-tech and high-touch methods to regularly inform all employees of our progress towards One NASA.

Note that informal communication media that occurs on job practices, decisions, behaviors, and conversations must

be consistent with and reinforce the formal program. A number of survey respondents stated that only when they see actions and behaviors change will they finally believe in One NASA. In other words, the actions of those around and above you speak louder than the words of our formal communications program. The challenge of the One NASA implementation effort, and of the communications program specifically, is to influence informal communications by making sure that the "talk" gets "walked."

When taken together, these communications recommendations are designed to gradually change the expectations at all levels of the organization regarding everyday behaviors and thereby influence informal communications. The formal communications program should provide a stimulus to accelerate this process (and thereby start to influence informal communications) by focusing on evolving behavior norms and publicizing everyday actions that exemplify these norms.

Proposed Specific Communications Actions

March through June 2003. These months will be a transitional period designed to move from Phase II to Phase III. During this time, NASA senior leaders will be briefed regarding the contents of this report. These briefings are intended to communicate the information, to gain support for the report recommendations, and to identify preliminary accountabilities and sponsorship for individual recommendations.

The communication plan recommends that along with the announcement of the report, currently planned to be performed by the NASA Administrator, there is a need to issue statements of commitment and support by other Agency leaders. Such statements of support may include the identification of sponsors for individual actions and the associated commitment of resources. The report itself should then be widely distributed, published on the One NASA Web site, and addressed in various Agency and Center newsletters. Statements related to implementation planning should also be communicated through various multimedia identified in Figure 4.1.

A summary of these communications actions and the method used is:

- Communicate report recommendations to Agency leadership—face-to-face meetings and briefings.
- Announcement of Report by NASA Administrator —NASA TV and newsletters.
- Provide talking points to the Agency leadership team.
- Field Center Tours by NASA leaders to promote the report.
- Announcement of report accountabilities and sponsorship—town meetings, NASA TV, newsletters.
- Report distribution—Wide hard copy distribution, One NASA Web site.
- Implementation Planning priorities and status —town meetings, One NASA Web site, Internal Press Announcements.

July through December 2003. The process of briefing Agency leadership will begin to identify the priority of recommendations and initiate the implementation planning. Throughout this period, continual communication and status is needed and can occur through management updates and on the One NASA website. Communication emphasis during this period will focus on implementation plans and actions for "quick victory" changes.
The communications actions should include:

- Implementation Status Updates—Quarterly reviews by the Administrator and more frequent status reports by Action Sponsors and Center and Enterprise leaders.
- Employee Awareness Program—Use of a poster program to measure and display progress.

- Final act ceremonies—Celebration of the final act to implement a change (like the President's bill signing at the White House).
- Town meetings and workshops—Focusing on conversations about One NASA behaviors and values.

2004 and Beyond. During this period, there will be a need to maintain a steady state of communications efforts that focus on individual changes and behaviors. It is important to integrate the various media into a comprehensive and broad-based communications program such as that illustrated in Figure 4.2. The use of periodic Web surveys of the workforce can help obtain feedback on the perception of progress and additional ideas for change actions.

A summary of suggestions communications actions includes:

- Implement a comprehensive Awards and Recognition program—Emphasize peer awards for different types of behaviors.
- Coordinate One NASA communications with the new Internal Communications office/function.
- Implement feedback mechanisms—Use Web-based surveys and focus groups to provide new direction to One NASA plans.
- Conduct additional Web surveys to assess progress and solicit additional suggestions.

5.0 Appendices

ONE TEAM, ONE JOURNEY, ONE NASA...
"Building the Future Together"

5.0 Appendices

A detailed history of One NASA, the people involved on the Teams, the results of all data analysis, benchmark studies, and various other information are included in a set of Appendices entitled Volume II that is available on the One NASA Web site at http://www.onenasa.nasa.gov/ under "Updates," or will be made available in print upon demand.

The specific items included in Volume II include:

- One NASA Background and History
- Change Initiative Benchmarking
- Approach to Data Collection and Analysis
- Leadership Interviews
- One NASA Survey—Description of Results
- One NASA Survey—Data
- Previous NASA Studies
- One NASA Linkage Report

6.0 References

ONE TEAM, ONE JOURNEY, ONE NASA...
"Building the Future Together"

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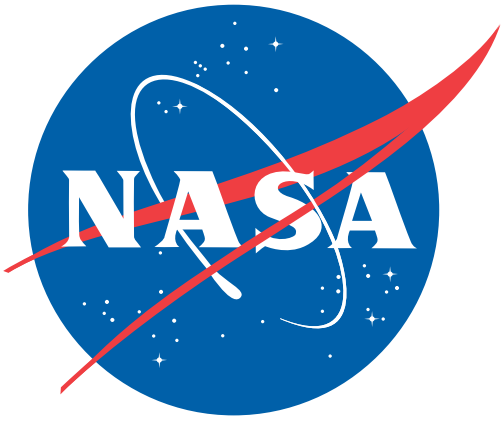
One NASA Recommendations Volume II



ONE TEAM, ONE JOURNEY, ONE NASA...
"Building the Future Together"

Volume II

Introduction

During the One NASA Phase II Study, a number of tasks were performed by the One NASA team that contributed to this Report and its findings and recommendations. The synthesis of all these efforts is presented in Volume I of this report, with primary focus on our eight recommendations. This volume presents the results of the individual tasks and activities performed during Phase II.

Contents

1. One NASA Background and History
2. Change Initiative Benchmarking
3. Approach to Data Collection and Analysis
4. Leadership Interviews
5. One NASA Survey—Description of Results
6. One NASA Survey—Data
7. Previous NASA Studies
8. One NASA Linkage Report

1. One NASA Background and History

The concept of a unified NASA organization is not new. Over the past years and under several NASA Administrators, efforts have been made to increase unification across NASA. The current One NASA effort is a continuation of previous efforts. It is powered by a strong grass roots effort and endorsed by the current Administrator, Sean O'Keefe, and other NASA leaders.

The current One NASA effort is the outgrowth of a series of developments starting with the 2000 NASA Professional Development Program that worked on defining One NASA—not as a class assignment but as a self initiated effort motivated by strong feelings for NASA's future. More recent efforts by class members of the 2001 Managing the Influence Process (MIP #23) and the 2002 SES CDP program have resulted in this current four-phased approach.

The One NASA Team was initially formed in July 2002. The team consisted of nine members, headed by Jim Kennedy, then of MSFC. Later, after Kennedy was named Deputy Director of KSC, Johnny Stephenson of MSFC became the team lead. The initial activity of the team defined a three-phase approach to the One NASA Initiative. Those phases were:

- Phase I—Concept Development
  Completed in September 2002.
- Phase II—One NASA Study
  To be completed in April 2003 with the publication of this study; provided the opportunity for NASA leaders and employees from all centers to provide input and help shape the future effort. Phase 2 also added additional members to the One NASA team.
- Phase III/IV—Implementation
  Scheduled to start in the second quarter of 2003.

Phase I

The specific charter of the phase I effort was to:

- Define One NASA.
- Develop an approach to becoming One NASA.

The team consisted of

- Jim Kennedy, MSFC (Chair)
- Johnny Stephenson, MSFC
- Julian Earls, GRC
- Michele Foster, KSC
- Cheryl Yuhas, HQ
- Roslin Hicks, MSFC
- Myron Webb, SSC
- Loren Lemmerman, JPL
- Hugo Delgado, KSC

The development of a One NASA definition was and is a challenging activity since different people express the purpose of One NASA in different ways. The following definition was developed during Phase I and it continues to be refined.

> *One Team, One Journey, One NASA—a synergism of individual capabilities through teamwork and expressed through the practice of interdependence across the Agency. One NASA is reflected in the integration of NASA plans, policies, procedures, processes, and actions. One NASA places the good of the Public and Agency above the interests of any one element and embodies the spirit and practice of a shared NASA vision and mission.*

The recommended action plan for Phase II was developed as part of the Phase I activity. The action plan consisted of the following elements:

- Commitment from senior Leadership
- Administrator roll-out
- Obtain feed back from the major stakeholders and the employees – the Phase II Study
- Phase II Report and Phase III Implementation Plan.

In September 2002, the Executive Council approved the Phase I activities and commissioned the team to move forward with Phase II.

Phase II

The Phase II effort began with an expansion of the One NASA team to include representatives from each of the NASA Field Centers and the contractor community. The current membership consists of the following individuals:

- Johnny Stephenson/Chair, MSFC
- Jim Kennedy/Advisor, KSC
- Gloria Betts, MSFC
- John Childress, DRFC
- Joe Conroy, **
- Hugo Delgado, KSC***
- Debbie Duarte, **
- Clay Durr, **
- Olga Gonzalez-Sanabria, GRC
- Karen Flynn, GSFC
- Michele Foster, KSC
- Sanjay Garg, GRC
- Richard Gilbrech, SSC
- Roslin Hicks, MSFC
- John Hinkle, LaRC
- Pete Jimenez, HQ
- Jan Moore, HQ
- Lee Norbraten, JSC
- Greg Schmidt, ARC
- Jerry Suitor, JPL**
- Myron Webb, SSC
- Cheryl Yuhas, HQ*

*Team Member and MIP 23 POC

**Consultant to One NASA Team

***SES CDP Class POC

Significant efforts during Phase II included:

- The coordinated Administrator and Center roll-out on December 11, 2002.
- Development of an outreach program featuring a Web-based employee survey. 5,400 employees and contractors participated with over 14,000 issues and suggestions on how NASA might become a more collaborative organization.
- Interviews with NASA senior leaders regarding their views on achieving One NASA.
- A review of past studies and analysis within the NASA community for possible relevance to the One NASA goals.
- The analysis of all inputs to develop recommendations and Phase III implementation and communications plans.
- Draft the Phase II Study report and present the preliminary results to Senior Leaders in face to face briefings.

- A literature search for best practices in creating cohesive and collaborative organizations.
- A benchmarking effort that focused on nine companies within the commercial sector who have undertaken similar initiatives.

2. Change Initiative Benchmarking

The type of change activities associated with One NASA are not new to corporate America. Such initiatives are frequently driven by two reasons: 1) recent mergers and acquisitions bringing disparate corporate groups and cultures together; or 2) a changed business environment that requires business units to operate collaboratively rather than competitively. A review of change activities in corporate America that are similar to One NASA was performed by the One NASA Team during Phase II. The results from this benchmarking effort served to reinforce the findings and recommendations in this report, and provided guidance in shaping the Communications and Implementation Plans. Companies examined were:

- Daimler–Chrysler
- Brady Corporation
- Kimberly Clark
- Ericsson
- Cisco
- Shell Oil
- Bombardier
- Nestle-USA
- IBM

Taken in total, the experience of these companies helped to identify some basic themes related to effective change initiatives. These themes were:

- Communication and Alignment.
- Senior Management Involvement.
- Clear Goals and Objectives.
- Business Case.
- Progress Measurement.
- Time Issues.

Communication and Alignment

The three most important aspects of change initiatives are said to be communication, communication, and communication. Clearly from the benchmarking information this concept is strongly supported. For example, Daimler-Chrysler found that communication needed to be multilevel, cross-functional, and two-way to reach multiple audiences. They also found that multiple levels of communication media were required; using Web sites as the only communication form was not sufficient. They also found that using proactive two-way communication approaches such as gathering feedback, surveying the employees, and conducting town hall dialogs were very successful. Kimberly Clark saw education and training as a form of communication. They also used their communication efforts to gain and maintain buy-in throughout the execution of the change initiatives, as opposed to only at the beginning. Communication is also used to gain alignment between the employees and the vision/objectives of the effort. All companies found that communicating the reason why things need to change and the impact that is likely to occur to the employees creates and maintains the alignment.

Senior Management Involvement

The involvement of senior leadership is almost as important as communication. Without the credibility created by continual visible support from senior management, change initiatives will not succeed. Active senior leadership involvement in the change initiative is mandatory to demonstrate commitment. Passive acceptance is quickly viewed by the employees as active rejection. Bombardier observed that employees frequently ask who in a leadership position wants this initiative and who will be championing it. Shell identified that executive commitment makes everything go. Daimler-Chrysler found that having management report on progress and explain the status of

the initiative was very beneficial in demonstrating commitment and accountability. Ericsson utilized managers at one and two levels below the executive level; they also admitted that distraction of executive focus is common and must be managed.

Clear Goals and Objectives

The ability to articulate a clear vision for the change, tightly coupled with good communications, serves to address the skeptical reactions to change initiatives. The new vision must be supported by a set of goals and measurable objectives that lead to goal achievement. Kimberly Clark stressed the need to begin with the end clearly in mind. In all cases, the organizations benchmarked stressed the need to have a balanced set of objectives and goals. The balance comes from a set of short-term and longer-term activities. The short-term activities demonstrate to the employees the credibility of the change initiative and provide the employee stamina required for achieving the longer-term goals and objectives. The short-term items are sometimes called quick hits or quick wins.

Business Case

The business case helps to establish the vision, goals, and related objectives. The business case also provides a communication vehicle to answer the question, "Why are we doing this?" Shell Oil found that using the success of a piloted version of the change initiative helped develop the business case for the initiative to be applied to 17 other locations. The business case also identifies the impact on both the organization as a whole, the functional units, and the individual employees.

Progress Measurement

Establishing measurable objectives that move the initiative forward toward completion provides a means to measure progress. It also provides a topic for managers to report as they demonstrate their commitment to the change initiative. Shell Oil felt that measures were a must. Daimler-Chrysler thought that measuring the right things was important. Anything can become a measure but if the measures are not demonstrating progress toward a business goal, they are useless. Careful selection of measures is also important so that the same measures can be used across the entire organization.

Time Issues

Time is the enemy of change initiatives. There is a limited time before employee initiative fatigue sets in. There is also a limited time period during which the committed personnel are available. Companies must grapple with current and future day-to-day operations, and employees expect clean and defined time frames that will show key outcomes over a specified schedule. Bombardier found that employees wanted to know when the initiative started and stopped. Shell Oil found that accelerated timelines help to sharpen the focus. Ericsson found that once momentum was achieved, time was the significant pressure retarding the momentum.

Case Studies

Two companies were looked at in detail for change initiatives that were similar in scope to the One NASA effort. Those companies were Nestle-USA and IBM. Review of the change initiatives in detail identified four areas that were felt to be worthwhile of detailed examination. Those areas were:

- Vision/Goal of the Change Initiative.
- Form—description of the scope and form of the initiative including those company aspects that were included as part of the initiative.
- Stakeholder Impact—identification of the significant stakeholders and how the initiative impacted them.
- Timing—the duration of the initiative and role of timing in the complete actions.

Nestle-USA and the One Nestle Change Initiative

Nestle-USA consists of multiple and diverse business units dispersed geographically.

- Nestle-USA, Glendale, CA
- Nestle Ice Cream, Glendale, CA
- ALCON Laboratories, Ft. Worth, TX
- Perrier Group, Greenwich, CT
- Purina Petcare, St. Louis, MO

Nestle-USA accounts for 23 percent of the international company sales. Additional information includes:

- $8.1 billion sales (2001),
- 16,000 employees,
- 23 separate manufacturing facilities .

Vision/Goal of the Change Initiative

To make Nestle-USA more competitive by simplifying business processes and reducing inefficiencies throughout the organization.

Form

The form consisted of three critical characteristics:

- Simplification and integration of key business processes in four major areas (Order to Cash, Demand and Supply Planning, Procure to Pay, and Trade and Customer Management).
- Changes to the organizational structure.
- Development of common information systems.

Stakeholder Impact

- Division Managers—Performance of process improvements were linked to their performance evaluation and compensation.
- Account Managers—Enabled to manage entire account planning process.
- Third Party Sales Agents (Brokers)—Participation enabled in the planning process.
- Demand Planners—Given visibility into account forecasts and promotional activities.

Timing

The One Nestle effort was conducted over a one-year period in three phases:

- Business Process Definition
- Design and Configuration
- Implementation.

IBM and the One IBM Change Initiative

IBM is known to nearly everyone on the planet. It is today's largest provider of information e-business technology. The IBM business consists of:

- Nine principal lines of business
- 90,000 Business Partners
- Over 160 countries
- More than 40,000 products and services
- Over 316,000 employees.

Vision/Goal of the Change Initiative

To make a One IBM experience for customers, partners, and employees. The expected results were lower cost of doing business, less confusion in handoffs between business units, and common business processes for all business units.

Form

The form was four critical characteristics:

- Common worldwide processes.
- Common worldwide technology.
- Common data definitions.
- Common management reporting.

Stakeholder Impact

- Customer—One IBM to the market place (less confusion).
- Sales Force—Improvement of customer acquisition and retention.
- Sales Support and Customer Relations—Improvement in the level of marketing integration, use of analytics, and personalized interactions.

Timing

A clear business model with time phased goals was given to everyone from the beginning. There was a clear plan of events connecting past events that supported the effort and pointed in the right direction of development. There was also a clear communication of the status of rollout as it was and still is happening. There were consistent messages from all levels of management starting at the top but reinforced by employees' immediate management.

3. Approach to Data Collection and Analysis

The One NASA approach to collecting and analyzing data and reporting results occurred during the six-month Phase II activity. The team focused initially on developing an analytical framework that could be used to structure the study. The selected framework borrowed techniques that have been successfully used in industry. The centerpiece of this approach is an "embedment wheel" model to address specific outcomes, behaviors, tools, values, resources, business practices, and systems to enhance One NASA teamwork.

The "embedment wheel" (Figure 1) shows the elements of a systems-level approach to embedding change in the organization. The concept of embedment of core competencies emerges from literature on organizational change and core competency embedment (see Prahalad, C.K.; Hamel, G. (1990). The core competence of the corporation. Harvard Business Review, 68:3, 79-92) and (Synder, Nancy and Duarte, Deborah, Strategic Innovation: Embedding Innovation as a Core Competency. Jossey Bass, May 2003). Note that all categories of the embedment target the institutionalization of the change in the organization. All categories of the embedment wheel were used to sort the data from executive interviews and the Web-based survey and to develop recommendations.

The wheel framework led to the formulation of questions that would be used to interview senior leadership at all NASA Centers and Headquarters. The interview process, completed over a two-month period, focused on key leadership behaviors that would enable and disable the implementation of One NASA. NASA leadership was probed on what organizational structures and roles would be required to achieve One NASA. In particular, senior leadership was asked to identify what roles they would play in making One NASA a reality and how they would be champions for change at the agency. Finally, agency leadership was asked to list what criteria they would use as evidence that the agency was moving towards a One NASA. The results of leadership interviews were used as one of the primary inputs in drafting this report. The questions asked and the results of these interviews are summarized in this Volume II, Section 4 Leadership Interviews.

In addition to executive interviews, the wheel framework was used to design a Web-based 25-question survey focused at the NASA and contractor workforce. The One NASA survey was developed to gather more specific employee input on commitment to One NASA and suggestions for future actions. Survey announcements and invitations were sent to all NASA employees (18,193), contractors with a NASA email address (34,504), and JPL employees (5,175). The survey was opened for responses on December 11, 2002, and taken off-line on December 30, 2002. During the first of week of January 2003, members of the One NASA team met at the Stennis Space Center to evaluate and analyze the responses to the four open ended survey questions—generating over 14,000 separate inputs. The team developed seven categories that would be used to identify major themes in the survey. The seven categories were Leadership, Resources, Human Resources, Business Practices, Culture, Individual Actions, and Communication. The raw data from the analysis of the open-ended questions is included as Section 6 in this volume (Volume II). The analysis of other survey questions is included in

Section 5, One NASA Survey—Description of Results. The raw data from the analysis of the open ended questions, Section 6, includes the seven categories, subcategories, major themes, and relevant quotes for each subcategory. This data was combined with the results from the executive leadership interviews and other Phase II data collection including face-to-face and e-mail discussions between One NASA team members and NASA employees. The recommendations in Volume I of this report reflect the integrated data inputs from all sources.

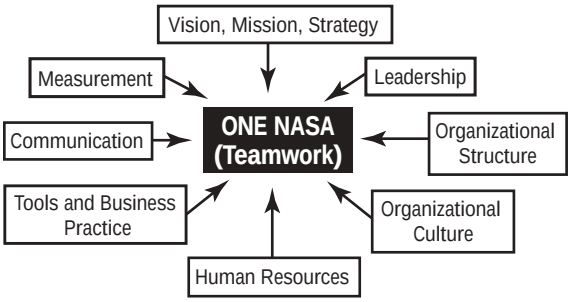


Figure 1. Embedment Wheel

4. Leadership Interviews

Method

One-to-one telephone and face-to-face interviews were conducted with the following individuals:

Headquarters	Centers
Mulville	Freeman
Stadd	Hubbard
Readdy	Elachi
Creedon	Campbell
Asrar	Stone
Weiler	Peterson
Pastorik	Stephenson
Jennings	Bridges
Strassman	Parsons
Kicza	Diaz
Bradley	
Mahone	
Novak	
Luedtke	

Interview Questions

1. What would enable the Agency to move toward One NASA—e.g., systems, processes, organization, values, technology, culture, norms, etc.?
2. Clearly, One NASA will require significant changes on all our parts.
   What do you think will be the most difficult challenge for Agency?
   What do you think will be the most difficult change for your Center/Enterprise?
   What might be the most difficult change for you personally?
3. One of the things we noticed at NASA, and the literature supports our observation in other organizations, is that middle management is critical for any change process, and will be for One NASA.
   What can the Agency do to help middle management become committed and take action on One NASA?

4. What can the top leadership team do to make One NASA a reality?
5. As you know, top leadership is critical to the success of this effort. You all need to be engaged and visible. What role would you like to play to make One NASA a reality—to be champions and change agents?
6. What criteria would you take as evidence that we are moving toward One NASA?

Key Points

- Current situation resulted over time and will take time to address.
- Top leadership behavior and trust are the primary enablers and disablers to One NASA.
- The achievement of One NASA is attainable and worthwhile.
- Organizational structure and roles might need to be examined to enable One NASA.
- One NASA isn't about being identical but being aligned. It is about leveraging what is good, unique and precious about our culture and leveraging it to create resources for our mission related work.
- Achieving the goal of One NASA will be very difficult and will require patience and persistence.
- Some decisions will impact individual entities while still being the right decision for NASA.
- The pursuit of One NASA is more cultural in nature and will be somewhat more difficult to measure. You will know it when you see it.
- Top management focus and communication is key to success.
- Engage all levels of management and employees in the formulation process for ownership, buy in, and commitment.

Detail Themes

Enablers

- Leadership from the top that absolutely embodies the definition of One NASA.
- The current leadership team.
- Trust that comes from walking within another person's shoes.
- Good communication strategy. Clear and continuous communication throughout the NASA workforce that is followed by consistent actions. Can't assume that communication at the next level will suffice.
- A clear vision for where the Agency is going that is embraced by the leadership team (regardless of code) and understood by the entire workforce—an integrated plan that defines the role for all codes. The concept of "Constructive Loyalty" (discussion, debate, decision, commitment) should be considered when laying out this vision and integrated Agency plan.
- Collaboration among NASA Centers (perhaps some cross enterprise projects).
- Technology (collaborative or virtual engineering capabilities, IT, IFMP).
- Talent and intellectual capital within NASA.
- A rewards system that recognizes One NASA.

Disablers

- Regional politics that isn't necessarily as interested in the whole of NASA so much as the good of a region.
- Center-centric focus driven by the power of regional politics (Center Directors clearly have two masters, project managers clearly have multiple masters).
- The unhealthy competition that exists between HQ codes and between Centers.
- Current lack of trust between HQ and the Centers and among Centers. Skepticism about the rationale for distributing work, resources.
- Fear of losing control.
- Middle management, if not committed to the philosophy of One NASA.
- Apathy among employees that perceive One NASA as a Sean O'Keefe initiative that passes when he moves.
- Fear of change.

Actions Areas

- Define what One NASA really means in simplistic, objective-oriented terms that is easily communicated and understood by all employees.
- Address some level of mobility within the Senior Executive Service.
- Seek some level of balanced mobility that includes middle management and other potential leaders (GS–12/13/14). This may be in the form of actual mobility to another Center or HQ, while also including more mobility within a Center. This element should also include wider participation on Agency-level teams at each Center.
- Select the right leaders for the future. Senior leaders should be selected more on their breadth of good experience rather than their depth of experience in any one realm.
- Help the leadership team (including middle management and team leads) clearly understand the concept of One NASA in order to properly demonstrate the concept through management practice.
- Engage all levels of management in the formulation process for absolute ownership (engage, consider, discuss, decide, communicate why).
- Engage the NASA workforce with an air of openness to achieve buy-in. The concept of "Constructive Loyalty" should again be considered during this process.
- Stress that communication from the leadership team should regularly include discussion of the NASA vision/mission and One NASA.
- Continue the Quarterly Leadership retreats that cross Center bounds.
- Implement quarterly working group meetings that cross Center bounds.
- Implement performance evaluations that include some measure of inter-Center work performance.
- Incorporate the concept of One NASA accountability throughout the Agency.
- Implement rewards that recognize One NASA behavior.
- Implement some concrete actions early and consistently that visibly demonstrate the One NASA philosophy. (Need some home runs early)
- Help the workforce see the real possibilities of One NASA. The opportunities should be seen just as clearly as the risk of change.
- Augment training classes to promote inter-Center teams that are required to work real problems that will then build trust and teamwork.
- Advertise those capabilities that are available to us around the Agency to truly work in a more collaborative environment.
- Benchmark some successful organizations that have dealt with such an undertaking in the past.

Metrics for Measuring Progress

- Results and outcomes will be more evident as a result of doing things more efficiently within the budget we are given and the schedule we have planned.
- The real measure will be long term.
- Level of collaboration across Centers (number of joint proposals on tasks).
- Annual assessment or survey that measures inter-Center working relationships.
- Number of earmarks within the NASA budget.
- Less Center-centric conversations and more NASA-centric conversations (cultural measure).
- Level of trust among leadership team.
- Less dividing the pie mentality.
- When more employees refer to themselves as NASA employees rather than specific Center employees.

Themes That Don't fit in Above Areas

- Achieving One NASA will not require significant change on all parts since we are closer to the accomplishment than indicated.
- One NASA is about building the future, together!

- One disabler is the lack of a strong HQ program management function.
- Consider the establishment of an inter-Center forum for NASA collaboration that consists of the Center Deputy Directors. This forum would champion the One NASA initiative from the top.
- Need some rules of engagement that will not be violated when making tough decisions with limited resources and then holding others accountable.
- To effectively implement such a significant change, we may need to engage some people skilled in change management.
- One metric for measuring progress is more equity in FTEs and funding.
- Public Affairs system at NASA should revolve around One NASA rather than 10 Centers. We need to promote those things we are trying to accomplish from an Agency perspective.
- NASA Web sites are a kluge.
- Need to achieve the right balance between required capabilities within a Center and using other Centers to help accomplish a project. Need to look at facility utilization factors.
- People need to see how things fit within the One NASA philosophy. The more problem people have in understanding why, the less likely they will be to buy-in.
- NASA's Center of Excellence philosophy isn't necessarily counterproductive to the One NASA philosophy, yet some view it that way.
- Throughout history you see that the common thread that unifies people behind an enterprise will be a perceived threat. The greatest enabler will be a perceived threat.
- Need to review some entities that achieved success yet failed afterward. They didn't meet the new challenge.
- Must implement mobility in such a way that individuals don't lose home standing while serving on an Agency team or while working on another Center's project.
- While full cost accounting can be an enabler for One NASA, must implement using consistent guidelines across the Agency to ensure consistent content.
- Need to incorporate some level of standardization within our engineering management culture (need to better share our lessons learned across Centers—not just neat stories but organized points for consideration, should be making informed decisions to reinvent; need to be more disciplined in our program/project management rather than letting managers chose which parts of the project plan they want to implement; need to use standardized processes for selecting engineering tools across the agency—this doesn't say that everyone will use the same tool but possibly define a default tool with appropriate decision paths for external tools; need to better under stand what other Centers do).
- Can't manage an Agency as expensive hobbies.
- Lines of authority need to be clearly communicated within the Agency. Employees and leaders need to better understand the interaction between leadership roles within NASA today (IPOs, AA, Center Directors).
- As One NASA becomes a reality, our Center Directors will become institutional support personnel and everyone will work for the Programs.

5. One NASA Survey—Description of Results

The One NASA team constructed a questionnaire of 25 items that was placed online and opened for responses on December 11, 2002. The Survey was closed and the questionnaire taken offline on December 30, 2002. By December 17, 98 percent of all respondents had completed the questionnaire.

The following describes the survey data in broad terms as well as their representativeness. The descriptions are preliminary and designed only to give an appreciation of the

magnitude of the responses and their representativeness. Subsequent reports will show the results of more detailed analyses of the data. An appendix lists each of the questions in the survey and summarizes data for each of them.

General Description of the Data

Invitations to respond to the Survey were sent to all NASA employees (18,193), contractors with a NASA email address (34,504) and JPL employees (5175). These preliminary estimates of the number of invitations sum to 57,872. Only one invitation was sent to each invitee with no reminders. In addition, most of the NASA employee population was encouraged by one or more individuals at their installation, and also often their Directorate, to complete the Survey. No such encouragements were made to the contractor population. After being invited, individuals made their own determination as to whether or not to respond to the Survey. Individual identities of the respondents were not collected.

The Survey was responded to by 5404 persons or nine percent of the target population. Also, not all 5404 answered every question. This is important as the numbers reported in subsequent sections vary depending on the Survey question the data are based upon.

The first question about one's knowledge of One NASA was answered by 5404 respondents. The sets of questions requiring textual input (e.g., name an enabler of One NASA) were each answered by about 1700 respondents who offered approximately 2700 examples for each of the three questions in a set. The last six questions about demographics were generally answered by 3760 respondents.

Representativeness of the Survey Respondents

Overall the Survey respondents are probably representative of the total target population. One argument for this position is that the total number of respondents to the Survey greatly exceeds the minimum number required to have a representative sample if "random sampling" had been used to select respondents rather than the invitees self-selecting. In particular, for the target population of 57,872, only 383 respondents are needed for a representative sample, if they are truly randomly selected. This number is based on the most stringent assumptions about the variability in the data as well as a 95 percent probability that the means calculated from the Survey are within plus or minus five percent of the true means for the target population.

However, respondents were not randomly selected as they made their own determinations about whether or not to respond. On the other hand, there are few data available to indicate there were biases operating in the selection of the respondents.

Another argument that the respondents are representative of the target population is that almost all of the segments of the target population are properly represented in the Survey sample. For example, the percentage of GS 15s in the sample is almost the same as the percentage of GS 15s in the entire target population. This type of similarity exists for almost all segments of the population (e.g., installation, grade, years at NASA, etc.) as is shown in the following sections.

Employer

In order to be confident that each employer's population of employees is adequately represented in the Survey, their percentage of the Survey respondents should be similar to their percentage in the target population. To compare such percentages, Figure 1 is offered and shows the percentages of the 3,787 respondents per employer, that responded to the question that asked them to indicate their employer (shaded columns). The unshaded columns depict the percentages of the total target population (57,872) associated with each of the employers. Surely the NASA and JPL employees are adequately represented in the Survey, as they constitute a percentage of the Survey

respondents equal to or greater than their percentage of the target population. In fact the NASA employees are over-represented. (This assumes that the 1,617 respondents, who answered the first question but did not answer the question about employer, are distributed across employers as are the 3,787 respondents who did indicate their employer).

More importantly, the contractor respondents comprise about half the percentage of the Survey respondents as they do the target population. As shown in Table 1, 1,235 contractor employees answered the question about employer. Thus the data from employees of contractors are under-represented in the Survey as a whole. This problem was considered when analyzing Survey data for which comparisons were made involving contractor employees' data and the other employers' data.

However, the employees of contractors who responded to the Survey may adequately represent the entire population of such employees for purposes of representing their ideas and sentiments, but not as mentioned, for comparisons with other employer's respondents. The reason they may adequately represent the contractor population is that only a small portion of the 1,235 contractor respondents to the Survey were needed to make it representative of the contractor population (again assuming a truly random selection of the respondents).

Table 1. Numbers per employer of respondents and target population.

Employer	NASA	JPL	Contractors
Respondents	2,185	367	1,235
Target Population	18,193	5,175	34,504

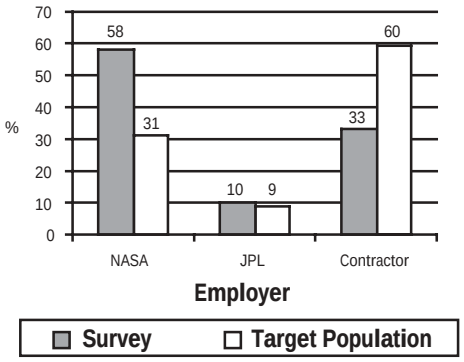


Figure 1. Employers of the respondents and target population.

Installations

The representation in the Survey of each installation is shown in Figure 2. It also depicts a comparison between each installation's contribution of respondents to the survey (gray columns) and their representation in the total NASA population. Only NASA employees are represented in the figure while the next figure includes all respondents. Also, Figure 2 represents only those answering the question about installation, and thus only 2,162 respondents. Except for Johnson and Langley, the percentages for the survey and the total NASA population are similar and there is no significant difference between the two groups of numbers as a whole. On the other hand, Langley is a slightly over-represented and Johnson under-represented.

Table 2 shows the numbers of NASA respondents per installation as well as the number of NASA employees located at each installation. While the pairs of percentages in Figure 2 generally show that the installations are properly represented in the whole Survey, the numbers in Table 2 show that there were some relatively small numbers for some installations. The importance of the small numbers is only that the data for a single installation should not be analyzed by themselves, as if they constitute a representative sample for a single installation.

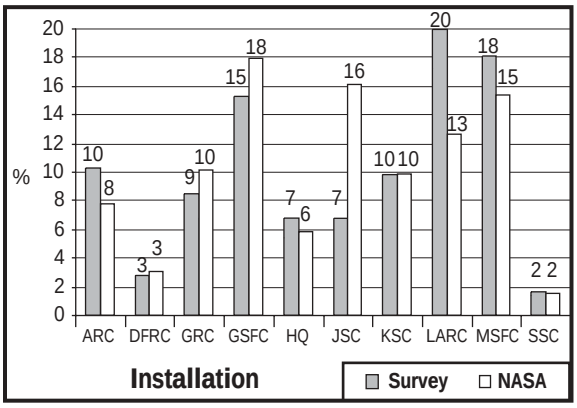


Figure 2. Installations' representation in Survey and NASA.

Table 2. Numbers of NASA employees per installation for Survey and NASA population.

Installation	Survey	NASA
ARC	212	1,405
DFRC	63	557
GRC	189	1,833
GSFC	325	3,192
HQ	151	1,076
JSC	144	2,918
KSC	210	1,793
LARC	431	2,313
MSFC	393	2,630
SSC	44	285
Sum	2,162	18,002*

*Does not include the 192 IG personnel.

Figure 3 shows the same type of data as Figure 2 with the addition of JPL and contractor employees for all installations. Thus the Figure shows the total contribution of NASA (or JPL) and contractors per installation. As shown in Table 3, this greatly increases the number in the denominator used to calculate the percentages for each installation's contribution to the target population (unshaded columns).

Again, the pairs of columns' percentages are roughly similar except for a few installations. JSC is still under-represented as is KSC which has a large contractor population. Both LARC and MSFC are slightly over-represented.

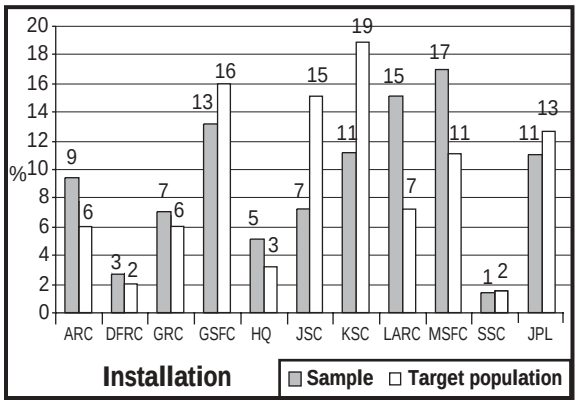


Figure 3. JPL and installations' representation in Survey and NASA.

Table 3. Representation of installations' in Survey and target population.

Installation	Survey	NASA
ARC	339	3,481
DFRC	94	1,272
GRC	225	3,731
GSFC	505	9,050
HQ	179	1,560
JSC	270	8,912
KSC	409	10,874
LARC	573	3,999
MSFC	632	6,327
SSC	47	1,084
JPL	400	7,331
Sum	3,673	57,621*

*Does not include the 192 IG personnel.

Leadership Role

Figure 4 shows the percentages of respondents (NASA, JPL and contractors) per leader role for this Survey (shaded column) and the recent Mobility Survey in which over 4,000 NASA employees responded (unshaded columns). The Mobility Survey numbers are being used as comparisons because leader role is not a categorization NASA uses to classify the entire population of employees.

The remarkable similarity between the two sets of columns lends credibility to the argument that the respondents to the One NASA survey are representative of the target population. Table 4 shows the numbers of respondents who indicated their leadership role.

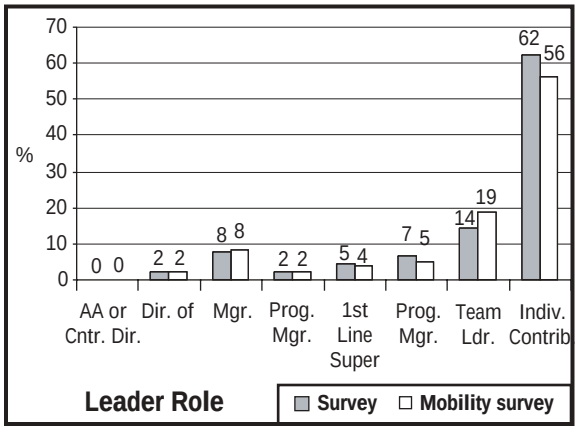


Figure 4. Respondents per leader role for Survey and mobility survey.

Table 4. Numbers of respondents per leader role.

AA or Center Director	11
Director of	76
Manager	287
Program Manager	86
1st Line Super	170
Project Manager	248
Team Leader	532
Individual Contrib.	2308
Sum	3718

Grade

The same type of argument indicates that the Survey respondents appear to be representative of all grades in NASA. This is shown in Figure 5 that depicts the percentage of the NASA employee respondents per grade range (shaded columns) as well as the percentages for the entire NASA population (unshaded columns). The similarity of the sets of columns is great, thus lending credibility to the argument that the respondents are representative of the entire range of grades in NASA. The numbers per grade are shown in Table 5.

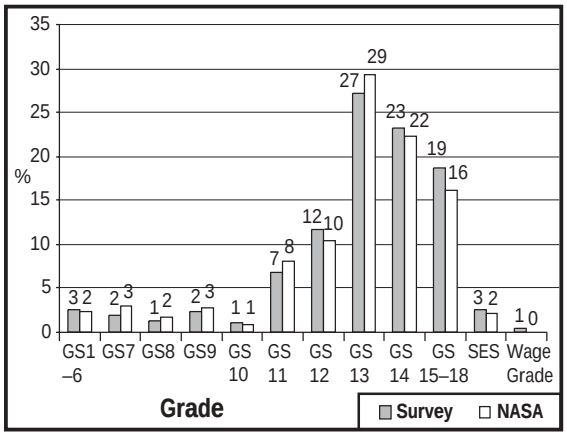


Figure 5. Grades of the survey respondents and total NASA population.

Table 5. Numbers per grade of respondents and NASA population.

GS Levels	Survey	NASA
1–6	56	415
7	43	525
8	27	295
9	49	477
10	22	156
11	149	1,484
12	255	1,891
13	593	5,358
14	518	4,067
15–18	409	2,968
SES	57	412
Wage	11	51
Sum	2,189	18,099*

*Does not include IG personnel.

Occupation

As with other demographics, the respondents appear to be representative of all occupations in NASA. This is shown in Figure 6 whose shaded columns represent percentages of the Survey respondents that in this case include NASA, JPL and contractors. On the other hand, the unshaded columns show only the percentages of each occupation in

the NASA employee population (not including JPL and contractor employees whose numbers are not known). The numbers for these categories are shown in Table 6.

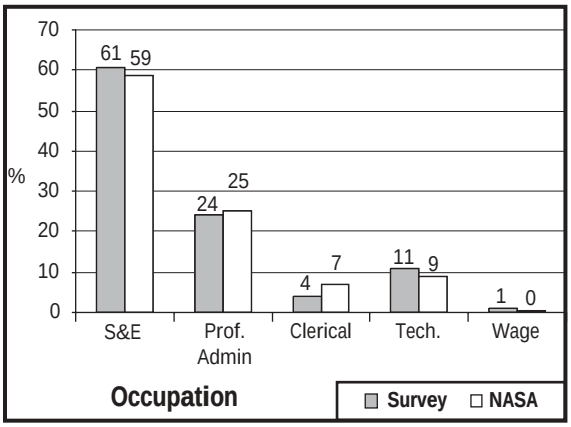


Figure 6. Occupations of the respondents and target population.

Table 6. Numbers per occupation of respondents and NASA population.

	Survey	Target Population
S&E	2,247	10,670
Prof. Admin.	890	4,607
Clerical	139	1,217
Tech.	396	1,648
Wage	31	51
Sum	3,703	18,193

Years at NASA

Figure 7 shows the percentages of respondents who have been working for NASA for various ranges of years. The percentages are based on NASA, JPL and contractor employees and depicted by the shaded columns. The un-shaded columns depict the percentages from the Mobility Survey mentioned previously. Again, the sets of columns are very similar.

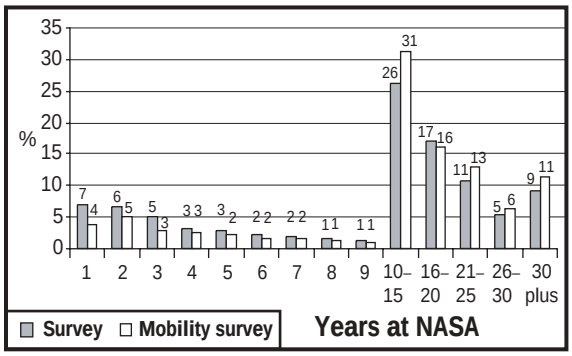


Figure 7. Number of years at NASA for respondents.

Table 7. Numbers of respondents per years at NASA for respondents.

Years at NASA	Respondents
1	266
2	244
3	192
4	122
5	109
6	79
7	69
8	56
9	51
10–15	988
16–20	644
21–25	409
26–30	205
30 plus	340
Sum	2,162

Summary of Results by Question

Please indicate your level of knowledge about One NASA by selecting accurate of the following;
Total number of responses to this question: 5,385

		Percent 10 20 30 40 50 60 70 80 90 100
I know about One NASA only to the extent of the material in this survey.	35.64% (1,919 out of 5,385)	
I have read the One NASA briefing at the site specified in the e-mail inviting me to this survey.	42.10% (2,267 out of 5,385)	
I know more than what is on the site specified in this e-mail.	18.92% (1,019 out of 5,385)	
I know much about One NASA and have contributed to the initiative.	3.34% (180 out of 5,385)	

Please indicate how committed you are to the concept One NASA;
Total number of responses to this question: 5,319

		Percent 10 20 30 40 50 60 70 80 90 100
Not at all	6.96% (370 out of 5,319)	
A little	7.33% (390 out of 5,319)	
Some	17.09% (909 out of 5,319)	
Pretty much	19.83% (1,055 out of 5,319)	
Very much	22.54% (1,199 out of 5,319)	
Almost completely	5.85% (311 out of 5,319)	
Completely	20.40% (1,085 out of 5,319)	

Can you think of any enablers with which you are familiar and that you can mention;
Total number of responses to this question: 5,353

		Percent 10 20 30 40 50 60 70 80 90 100
Yes	35.30% (1,883 out of 5,335)	
No	65.04% (3,470 out of 5,335)	

Please name and explain the enabler;
Number of respondents answering at least one part of this question: 1,514

		Percent 10 20 30 40 50 60 70 80 90 100
Name	24.94% (1,514 respondents answered)	
Explanation	24.37% (1,479 respondents answered)	

Please name and explain another enabler which you are familiar;
Number of respondents answering at least one part of this question: 777

		Percent 10 20 30 40 50 60 70 80 90 100
Name	12.80% (777 respondents answered)	
Explanation	24.37% (751 respondents answered)	

Please name and explain another enabler which you are familiar; Number of respondents answering at least one part of this question: 381	
	Percent 10 20 30 40 50 60 70 80 90 100
Name	6.28% (381 respondents answered)
Explanation	5.98% (363 respondents answered)
Can you think of any disablers you wish to mention? Total number of responses to this question: 4,926	
Yes	39.38% (1,940 out of 4,926)
No	60.84% (2,997 out of 4,926)
Please name and explain the disabler; Number of respondents answering at least one part of this question: 1,758	
Name	28.96% (1,758 respondents answered)
Explanation	28.48% (1,729 respondents answered)
Please name and explain another disabler with which you are familiar; Number of respondents answering at least one part of this question: 768	
	Percent 10 20 30 40 50 60 70 80 90 100
Name	12.65% (768 respondents answered)
Explanation	12.37% (751 respondents answered)
Please name and explain another disabler with which you are familiar; Number of respondents answering at least one part of this question: 326	
Name	5.37% (326 respondents answered)
Explanation	5.24% (318 respondents answered)
Can you think of any such teams or individuals you wish to mention? Total number of responses to this question: 4,696	
Yes	25.57% (1,201 out of 4,696)
No	74.55% (3,501 out of 4,696)
Please list the first team or individual that embodies/embodied One NASA; Number of respondents answering at least one part of this question: 1,082	
	Percent 10 20 30 40 50 60 70 80 90 100
Name	17.83% (1,082 respondents answered)
Contact Information	15.04% (913 respondents answered)
Please explain why	16.97% (1,030 respondents answered)
Please list the next team or individual that embodies/embodied One NASA;	
Name	1.25% (76 respondents answered)
Contact Information	0.97% (59 respondents answered)
Please explain why	1.14% (69 respondents answered)

Please list the name of the first activity, action, process, and a brief description of it; Number of respondents answering at least one part of this question: 2,015		
		Percent 10 20 30 40 50 60 70 80 90 100
Name	33.20% (2,015 respondents answered)	
Description	31.15% (1,891 respondents answered)	
Please list the name of the next activity, action, process, and a brief description of it; Number of respondents answering at least one part of this question: 958		
Name	15.78% (958 respondents answered)	
Description	14.61% (887 respondents answered)	
Please list the name of the next activity, action, process, etc; Number of respondents answering at least one part of this question: 397		
Name	6.54% (397 respondents answered)	
Description	5.95% (361 respondents answered)	
First critical action that all of us could take; Number of respondents answering at least one part of this question: 1,626		
		Percent 10 20 30 40 50 60 70 80 90 100
Name	26.97% (1,626 respondents answered)	
Description	23.77% (1,443 respondents answered)	
Next critical action that all of us could take; Number of respondents answering at least one part of this question: 579		
Name	9.54% (579 respondents answered)	
Description	8.32% (505 respondents answered)	
Next critical action that all of us could take; Number of respondents answering at least one part of this question: 247		
Name	4.07% (247 respondents answered)	
Description	3.57% (217 respondents answered)	

Please indicate your employer; Total number of responses to this question: 3,787		Percent 10 20 30 40 50 60 70 80 90 100
NASA	57.70% (2,185 out of 3,787)	
JPL	9.69% (367 out of 3,787)	
NASA Contractor	32.61% (1,235 out of 3,787)	
Please indicate the NASA installation at which you are employed; Total number of responses to this question: 3,750		
ARC	9.04% (339 out of 3,750)	
DFRC	2.51% (94 out of 3,750)	
GRC	6.80% (255 out of 3,750)	
GSFC	13.47% (505 out of 3,750)	
HQ	4.77% (179 out of 3,750)	
JPL	10.67% (400 out of 3,750)	
JSC	7.20% (270 out of 3,750)	
KSC	10.91% (409 out of 3,750)	
LARC	15.28% (573 out of 3,750)	
MSFC	16.85% (632 out of 3,750)	
SSC	1.25% (47 out of 3,750)	
WFF	1.25% (47 out of 3,750)	

What is your current role? Total number of responses to this question: 3,718		Percent 10 20 30 40 50 60 70 80 90 100
Individual Contributor	62.08% (2,308 out of 3,718)	
Team Leader	14.31% (532 out of 3,718)	
Project Manager	6.67% (248 out of 3,718)	
Program Manager	2.31% (2,308 out of 3,718)	
First Line Supervisor	4.57% (2,308 out of 3,718)	
Manager	7.72% (2,308 out of 3,718)	
Senior Leader (e.g., director of)	2.04% (2,308 out of 3,718)	
Executive Leader (AA or Center Director)	0.30% (2,308 out of 3,718)	
What is your occupation? Total number of responses to this question: 3,703		
Scientist	10.75% (398 out of 3,703)	
Engineer	49.93% (1,849 out of 3,703)	
Professional Admin.	24.03% (890 out of 3,703)	
Clerical	3.75% (139 out of 3,703)	
Technician	10.69% (396 out of 3,703)	
Wage Grade	0.84% (31 out of 3,703)	
What is your grade? Total number of responses to this question: 3,741		
GS 1–6	1.50% (56 out of 3,741)	
GS 7	1.15% (43 out of 3,741)	
GS 8	0.72% (27 out of 3,741)	
GS 9	1.31% (49 out of 3,741)	
GS 10	0.59% (22 out of 3,741)	
GS 11	3.98% (149 out of 3,741)	
GS 12	6.82% (255 out of 3,741)	
GS 13	15.85% (593 out of 3,741)	
GS 14	13.85% (518 out of 3,741)	
GS 15	10.93% (409 out of 3,741)	
SES	1.52% (57 out of 3,741)	
Wage Grade	0.29% (11 out of 3,741)	
JPL	8.79% (329 out of 3,741)	
Contractor	31.49% (1,178 out of 3,741)	
Other	1.20% (45 out of 3,741)	

How many years have you been a NASA or JPL employee or working for a NASA contractor?
Total number of responses to this question: 3,754

		Percent
		10 20 30 40 50 60 70 80 90 100
1	7.09% (266 out of 3,754)	
2	5.97% (266 out of 3,754)	
3	5.11% (266 out of 3,754)	
4	3.25% (266 out of 3,754)	
5	2.90% (266 out of 3,754)	
6	2.10% (266 out of 3,754)	
7	1.84% (266 out of 3,754)	
8	1.49% (266 out of 3,754)	
9	1.36% (266 out of 3,754)	
10–15	26.32% (266 out of 3,754)	
16–20	17.16% (266 out of 3,754)	
21–25	10.90% (266 out of 3,754)	
26–30	5.46% (266 out of 3,754)	
30 plus	9.06% (266 out of 3,754)	

6. One NASA Survey—Data

The recommendations in Volume I of this report were developed from the data collected during the One NASA Phase II Study. The data in this appendix section was drawn from the online survey that received broad input and resulted in many of the recommendations. Survey data from the open-ended questions (approximately 14,000 individual comments) was grouped by subject into seven categories and divided into subcategories and themes. These categories were based on the eight categories in the Embedment Wheel framework and adapted to the type of data resulting from the survey. Analysis of the raw survey data was performed by One NASA data analysis teams—one team for each of the seven categories. The following sections constitute the output from each of these teams. Although the team outputs differ slightly, most follow the following format:

Category:

The seven categories used for data analysis were:

- Leadership
- Resources
- Human Resources
- Business Practices
- Culture
- Communication
- Individual Actions

Definition

A short paragraph that defines the category and summarizes the findings.

Subcategory 1:

Definition of sub-category.

Theme #1:

Name and description of theme.

Short paragraph that summarizes what we found.

Quotes, taken from the survey data that best represent the theme or a particular point of view.

Theme #2:

Theme #3:

Exceptional statements for this subcategory—a noteworthy quote that, in the opinion of the analysis team, deserved to be highlighted—not included in all sections.

Other comments—when material in one category appeared to overlap another category, comments were noted —not included in all sections.

Category: Leadership

Definition:

Workers want desperately to be working on something that is clearly recognized as critical and important across the Agency and for the nation. Walk the talk: If leaders act in visible ways, the rest will follow. A lot of skepticism —will it last beyond "flavor of the month"?

Subcategory: Leadership Strategy

These are responses that indicate belief and understanding —or lack of it—in the Agency Vision and Mission statement. This relates to the clarity of the statements, the ability of our leaders to articulate and communicate their meaning to the workers, and evidence that workers accept and understand the vision/mission as it relates to the jobs they do everyday. It also addresses whether employees perceive that all activity that is conducted by the agency actually flows down from the vision/mission, and that management decisions are rational, disciplined outcomes of supporting the vision/mission.

Theme #1: Lack of a common and compelling goal

The workers desire common goals—often a single,

overarching goal—preferably concrete and measurable. The goal(s) must be compelling not only to Agency workers, but to the nation, answering a national need so that there will be long-term, multiyear support of the goal that ensures stable funding from year to year.

Several of the responses proposed one or more common goals, but it is clear that there is no consensus of what this goal should be—see next theme on clarity. There were several suggestions of specific goals to be adopted to the exclusion of others, which were often disparaged—e.g., "…re-align the agency around a very few, key tangible goals/missions. Eliminate those out-of-date sandbox technology work like aeronautics" or "Value aeronautics on a par with space" or "go to Mars."

Quotes:

- "Science is fine but it will not sell a program to Congress or the American people."
- "A real concrete goal for NASA as an Agency."
- "Defining specific goals would be the best convincing action of One NASA. A vague set of clichés will do nothing."
- "We…can be counted to unify around a genuine national need."
- "Are we going to send humans to Mars or not? Many of us are…yearning for a COMMON CAUSE."
- "…we need more than just goals; we need to address a [national] need."

Exceptional Statement:

A need for common values throughout all NASA organizations.

Theme #2: Clarification of the agency mission/vision

The agency mission/vision are generic concepts that do not have clear or measurable goals. All activities should be tied to specific goals/objectives that flow down from the vision/mission. The plethora of suggestions for common goals (see theme #1) indicate that workers need our leaders to explain the vision/mission and how it relates to the work they do by providing specific measurable goals that relate back to the vision/mission. Many responses simply advocated giving their current assignments and projects more visibility and higher priority, which implies that workers do not understand the vision/mission or have not accepted it.

Quotes:

- "I don't know the purpose or overall goals of the code that I work in."
- "NASA's new Vision and Mission statements are rather vague—almost anything…can be viewed as falling within them."

Exceptional Statement:

Senior leaders create educational workshops for teaching strategic plan and what is happening at Centers across the Agency/Agency capabilities.

Theme #3: Strategic Planning Process

Need consistent, effective and coordinated strategic planning process that flows down from the vision/mission to lower-level, concrete, prioritized goals that are consistently sustained through rational, logical decisions based on a clear, traceable strategy.

Quotes:

- "Make our program priorities and resource commitments truly reflect our current Mission and Vision statements…. They do not align now."
- "Agencywide strategic plan and budget to focus the individual Centers without regard to politics."
- "Although strategic plans exist,…tracking and oversight of an organization's as well as individual's performance to the goals/objectives does not exist."
- "Decisions to keep or give up core competencies say a lot about how important management feels certain areas of work really are."

Theme #4: Clarify what you mean by One NASA and show me specifics.

Survey respondents want direct answers and specific definitions, with milestones and goals. They didn't understand why the idea was important ("show me what's broken") and they didn't understand what benefits would be gained. They expressed concern that this was a way to disguise downsizing and job loss, and that identities/diversity would be lost.

Quotes:

- "State clearly what One NASA means and what steps each of us can take to implement. Clearly specify both advantages and disadvantages."
- "not clear what we are supposed to do"
- "Please define the problem One NASA is fixing."
- "The message is not getting across properly…. Many left [Mr. O'Keefe' presentation] early. They said he did not say anything."
- "I don't have a clear idea of what One NASA is. I would buy into it if it was more evident…what the benefits to me are."
- "Clear messages coming from leadership that explains what this effort is and how it will affect me."

Comments:

A history of cancelled programs that result in a funds distribution to different Centers implies lack of strategic planning and weak/vacillating HQ decision-making.

Subcategory: Leadership, Management Commitment, and Support

Definition:

Are managers truly committed to the concept, will they "walk the talk" and follow-through with action. "CONVINCE ME" issues. Leading by example will be critical not only for convincing employees, but for encouraging them to change behavior and speech. There is a clear sense that workers across organizations will collaborate because they are focused on accomplishing the technical objective, but that their managers discourage collaboration or sharing.

Theme #1: "Flavor of the month" skepticism.

We have a history of past management initiatives that have failed and faded into oblivion. Employee skepticism is high that this will be nothing more than lip service and there will be no long-lasting changes. Cultural change takes years, not weeks or months, and must include concrete changes in the political system and rewards system. Sustainability with real action (if One NASA is still alive and active after two years with some accomplishments under its belt) will go a long way to convincing people.

Quotes:

- "Most people are probably just expecting One NASA to blow over like all the other initiatives..."
- "fad of the week" "Another buzzword" "another bureaucratic pain" "wasteful mandatory directive" "You're kidding, right?"

Exceptional Statement:

- The next major communication should include a strawman plan with some specificity. Avoid perception of One NASA providing a one-size-fits-all solution.
- Feedback on results of this survey and other One NASA activities. People fill out endless surveys and never hear anything that resulted. Provide results of survey with the specific actions that have resulted.

Comments:

Comments saying 'this is a waste of time" and "this is another name for downsizing and job loss" were limited, but should be acknowledged to sway the skeptics who could be on the fence. If such comments are not acknowledged, those who entered them will believe that such negative comments were swept under the rug and immediately dismiss future consideration of the concept.

Theme #2: Top Leadership commitment through action necessary.

People are waiting to see what their leaders do. If our leaders emphasize teamwork and show solidarity among themselves, others will follow their example. Several responses indicate the belief that Center Directors have objectives separate from the overall Agency objectives, and that weak HQ managers permit parochial behavior. Although most responses were directed toward Center Directors, a few stated that the Enterprise AAs also act in stovepipes, and that O'Keefe must start with AAs. Top leaders are asked to demonstrate via decisions that they make for the good of the Agency even though they required sacrifices or punitive action. Example actions that have been listed as convincing:

- Changes in upper management appointments that have been made to advance One NASA (e.g. the switch in deputy center directors at MSFC and KSC).
- Removing someone who does not embody this behavior.
- Eliminating congressionally/politically-driven funding decisions.

Quotes:

- "It's not clear that headquarters leadership is either morally or intellectually strong enough to make One NASA work."
- "Most executives…have been 'trained' not to collaborate."
- "The Center Directors need to be deprived of their authority until they recognize that they serve NASA's mission, not their own objectives."
- "This will only work if leaders are honest with employees."
- "Protection of some sort for middle managers… who are interested in doing right…"

Exceptional Statement:

- Administrator/AA visits to NASA centers, management by walking around. Posters and videos are not good substitutes for face-to-face encounters.
- Rate senior managers on how other Centers perceive their cooperation.
- A monthly accountability meeting for Center Directors with feedback to the workers.

Comment:

A history of cancelled programs that result in a funds distribution to different Centers implies lack of strategic planning and weak/vacillating HQ decision-making.

Theme #3: Middle management commitment through action necessary.

Quotes:

- "My immediate supervisor has the greatest ability to influence my migration to a One NASA mentality. If it is not a priority for him, it won't be for me."
- "Perhaps there should be a widely publicized award for supervisors at all levels to recognize their positive influence on others by educating their employees about the vision, mission, and goals."
- "After 29 years, there remains one constant: Managers give lip service to upper managers and the old methods continue unabated."
- "Lower-level line managers pay plenty of lip service to the One NASA idea, but when it comes to make a commitment to share personnel, money, or resources, they adamantly refuse."

Exceptional Statements: "

- Create focus groups at each Center. If this exercise continues to be HQs-driven with one or two people representing each Center there is not likely to be broad buy-in to the final outcome."
- Use a pilot project. Show by example how One NASA provides a better, more efficient working environment.

Comment:

"Burden of administrative overhead is increasing at an exponential pace. People who are producing technical products are marginalized."

Subcategory: Leadership-Managerial Practices & Accountability

Definition:

Behaviors of managers and leaders—e.g., openness, receptivity, inclusion of ideas, trust. How managers treat employees and peers within and across organizations. Hold people accountable.

Theme #1: Inter-Center and inter-Enterprise competition/ collaboration

Quotes:

- "Allow other Centers to lead efforts typically reserved for particular Centers. The NASA Centers typically get stovepiped in what they are doing. They claim an excessive amount of ownership."
- "Center partnerships. Field Centers partner with each other to accomplish work assignments as opposed to trying to stop another Center from participating in an assignment."
- "Centers need to get their own departments and projects to work together before they're ready to become One NASA."
- "Having Centers compete for missions is counter to the One NASA philosophy."
- "With fewer and fewer directed assignments nowadays from HQ because of the budget cutbacks from Congress, NASA HQ has mandated that its programs be 'competitive.' This promotes inter-Center rivalry, mistrust, and acrimony because the Centers must fight with each other to get their funding."

Theme #2: Local priorities as barriers to One NASA

Local priorities taking precedence/empire-building/ parochialism leads managers to make decisions that benefit local projects and organizations without respect to Agencywide goals.

Quotes:

- "…I have been involved in a number of projects between NASA organizations and Centers that had extensive collaboration, using the best from each Center, prior to management involvement. Once management is involved at any level, branch head through Center Director, it becomes a turf war. The result is usually dropping the project and reprimands for conspiring to work with other NASA organizations."
- "When management looks beyond their little empires, and actually do something for the good of the agency, I'll believe in it (One NASA)."
- "Middle and upper management set their own priorities without regard of common goals."
- "Center management must wear a 'NASA hat' and not a 'Center hat' in their interactions and decisions."

Theme #3: Managers need to be held accountable for their performance, both on the job and for One NASA behavior.

Quotes:

- "Action against non-One NASA behavior—There will always be a minority of folks who don't want to participate in what or where an organization is going. When blatant behavior against One NASA is encountered, the individual's team or leadership should seriously address it."
- "Removal of Managers—once I see managers being removed from their positions and not being assigned within the Agency, I will be a believer (in One NASA)."

Exceptional Statements:

- Employee evaluation of supervisors.
- Senior leaders create educational workshops for

teaching strategic plan and what is happening at Centers across the Agency/Agency capabilities.

- Have a high-level One NASA POC at each center.

Comment

Out of Category idea: Create a NASA Science & Technology University for K-12 and universities; educational institutions to select classes that will be taught online by NASA employees.

Subcategory: Leadership—Organization / Structure

Theme #1: Reorganize the HQ/Center Relationship

Reorganize the HQ and Center relationship to shorten the chain of command from HQ to the Center project working level. Many different approaches were suggested to achieve this theme including.

Quotes:

- "Removal of the enterprise structure—this structure inherently divides the agency into competing factions"
- "Getting Center Management out of the program Chain of Command—When I see that the program management chain of command runs from HQ Enterprise to HQ/Center program office to project office with no role for Center management (including no role in hiring, firing, or pay) then I'll believe something real (change to One NASA) is happening here."
- "A one NASA approach would look much more like a matrix organization with the HQ codes and Centers as the two axes of the matrix, and the work/budget distributed without regard to which center is aligned under which code."
- "Locate decision makers at HQ—eliminate the fighting between Center Directors"
- "Strong NASA Headquarters—make HQ responsible for running major programs instead of Lead Center so that one Center could not control the destiny of another"
- "Although each Center has capabilities in specific areas, all contribute to the success or failure of NASA programs. Territoriality has developed over the years and should be discouraged as an impediment to NASA's missions."
- "Lead Centers designations artificially consolidate areas of technical work in one Center, whether or not that Center has the facilities, technical expertise, or workforce to carry out all the necessary tasks. This tends to cut off excellent work and potential contribution from other parts of NASA."
- "Eliminate designating one Center as the COE for an activity; instead, have activities at each Center be called a contributor to an area of work."
- "Clearly assign responsibilities to Centers—If each Center could be assured of its survival by having distinct clear responsibilities, then we may be more likely to willingly share information and ideas."
- "So there is no wasteful empire building and divisive turf battles."

Theme #2: JPL status of center or contractor

Many respondents do not clearly understand the role of JPL within the NASA team.

Quotes

"Make JPL salaries the same scale as government employees."

Exceptional Statements:

- HQ socials to get people from different codes talking to each other.
- Empower self-organizing peer groups at all levels (as opposed to management-appointed teams) that can solicit real participation and effectively evaluate the contributions of individuals to implement One NASA concepts and actions.

Subcategory: Leadership—Other

Most items could in fact be assigned to existing themes and subcategories; remaining items are specific complaints about supervisors and programmatic decisions, or are specific ideas or recommendations for actions.

Exceptional Statements:

State teamwork as a core value and follow through with awards/recognition.

Category: Resources

Definition:

Tools, technology, processes, skill mix/people, funding, and infrastructure.

Sub Category: Capabilities

Definition:

The tools (technology, processes) used to be productive and successful.

Theme #1: New Tools—Better tools are required in order to facilitate collaboration.

Efficient collaboration requires the proper tools, specifically video conferencing and computer based applications. Although NASA has begun using these types of tools, more tools are needed (e.g., Collaborative Engineering Environments) and the existing equipment needs to be upgraded. Computer-related tools monopolized the inputs. Connection/access to other Center's servers, mobility via the Web, electronic libraries, and wireless computer connectivity at all Centers are examples that were mentioned frequently.

A catalog of tools shared across the Agency would allow all Centers to take advantage of the technologies discovered by our fellow employees. A directory of experts was also suggested so that employees would have a resource for finding the "right person for the job." Sharing of knowledge is of great concern. Lessons Learned databases, technology trackers, capability databases, and electronic document libraries are some examples of how we can better share our wealth of knowledge.

Quotes

- "We would be able to do our jobs all that much better if we were given the tools that were required for each job that we have."
- "Being able to see calendars and schedule meetings across the Agency would make this now time consuming, e-mail intensive activity much easier."
- "Develop a capability database to describe the capabilities and past experiences of each team across NASA. This would enable engineers and researchers to go beyond one facility for getting information and advice."
- "Powerful tools that not only support, but encourage active sharing of information, goals, and strategies. From documents to voice and video communications, an easy-to-use, always available capability is important."

Theme #2: Tool Standardization and Consolidation

In addition to the right tools, successful collaboration requires a certain level of standardization. Computer software and hardware are primary targets for this effort. A single NASA network, homogeneous process for network access, and automated, centralized upgrades to all standard software applications were some of the suggestions. It is intended that these changes will lead to easier computer access, especially when located somewhere other than the home installation.

Data accessibility was another hot topic. Currently, there are too many documentation management systems being used. This makes it cumbersome and in some cases impossible for employees across the Agency to gain

access to all of the data they require. The management of documentation could be consolidated by using an existing system such as the NASA TechDoc system or Integrated Configuration/Data Management System (ICDMS) as the Agency standard.

Quotes

- "As more and more multi-Center projects operate within distributed environments, a common set of tools for the discipline would facilitate project activities."
- "We need to establish a common computer base across and within Centers. It would then allow users to easily share application data across all NASA users."
- "With common procedures, policies, and databases for storing information, all centers will be able to easily access required information."
- "I cannot transfer drawings of space flight hardware to other Centers because they do not use the same modeling software that I use."

Sub Category: People

The principal themes in this subcategory are: Knowledge Management, Outsourcing, and Skill Mix.

Theme #1: Knowledge Management

Knowledge Management describes the fact that the expertise of the NASA community is being lost through attrition, and where expertise still exists, it is hard to locate. Knowledge Management seeks to identify ways to share knowledge across the Agency.

Due to attrition (e.g., NASA's aging workforce), significant knowledge gained from decades of experience is being lost without being captured beforehand. Where expertise remains in NASA, there are no mechanisms/tools readily available that help locate that expertise so it can be utilized. A mentoring program to convey knowledge before it is lost is desirable.

Quotes

- "A Knowledge Management System, containing the specific skills, knowledge, abilities, educational back ground, and past project accomplishments of employees will allow managers to search for people with needed skill sets. For example, if I have a project related to nanotechnology, it would be helpful to me to search a database that will allow me to find out who, at other Centers, has experience in this field, what projects they worked on, and what results were accomplished."
- "Duplicative efforts are often performed because people are not generally aware that organization X at Center Y has the skills, knowledge, and expertise in a particular discipline. If we are to leverage our strengths to fulfill our mission, we need to know what those strengths are and where they reside."
- "New government employees need to be hired immediately to begin to learn as much as possible from older employees before those older employees retire or otherwise leave the Agency."
- "I would wager most Centers would not survive were it not for the fact that so many retirees leave one day and return as contractors the next."
- "Expertise is being lost, and no one is being trained to follow in the expert's footsteps."

Theme #2: Outsourcing

The level and type of outsourcing is questioned. There is a concern that expertise, as well as jobs, will be lost from the Agency. The rationale for outsourcing does not have buy-in. Level and type of outsourcing is questioned. Loss of jobs and expertise are a concern.

The respondents expressed a belief that outsourcing is being pursued to the detriment of the Agency. They are concerned about the impacts of outsourcing, both to them personally, and to the Agency as a whole. It is obvious from the data that there is misinformation regarding outsourcing.

Quotes

- "Nothing will tear up an agency faster than going through a process of deciding what organizations and locations in which to eliminate jobs."
- "NASA has no way to retain corporate memory, because the contractors come and go."
- "All the administration talk about privatizing is generally demoralizing, and demoralized people are not too motivated to change."
- Educate better the NASA workforce on the truths and myths of outsourcing. Keep repeating and updating the message.
- Perform a comprehensive study of skill mix to meet the strategic goals of the Agency vs. current workforce and anticipated attrition/outsourcing and develop long-range recruiting/retention approach to meet needs.

Theme #3: Skill Mix

Respondents are concerned that they have trouble getting access to the people they need regardless of their location. Due to geographic and administrative barriers as well as total numbers, needed personnel are not available to perform necessary work. There are significant impediments to utilizing expertise from another Center. These impediments include funding impediments, discouragement from Center management, etc. Within and between Centers, workforce allocations impede personnel moving to where they can be utilized more effectively. The lack of adequate support staff (e.g., secretaries) prevents mission efforts from being performed.

Quotes

- "In the absence of major programs it is extremely difficult for groups to work together across Center boundaries. In part this is because there is no mechanism for supporting internal tasks at one Center with personnel from another."
- "All job openings for all projects should be posted in a central location that can be easily searched. Then, each Center can search that database for tasks that it can accomplish and skills it can provide."
- "People and resources cannot be used by a program managed at another Center without lengthy approval and allocation by headquarters".
- "In a branch of between 20 and 30 civil servant scientists, we have one branch secretary. I spend perhaps 20 percent of my time doing filing and other secretarial tasks that could easily be done by a GS–7 or contractor employee, rather than a Ph.D. scientist."

Sub Category: Funding

Definition:

The funding subcategory is made up of six general themes, the principal being the first: distribution of funds (general), funding of projects, funding of research, lack of travel funding, insufficient funding (general), inter-Center funds transfer.

Theme #1: Distribution of Funds (General)

Funds are felt to be allocated inappropriately from Headquarters to end users (i.e., Centers, projects, research). Competition for work/money among centers is viewed as the principal disabler to the goals of One NASA by a significant number of respondents. Many inputs suggested that program/project monies be controlled by HQ rather than by Centers. A win-win instead of win-lose concept is sought after.

The basis of funding allocation across NASA is deemed as a significant disabler of One NASA. The allocation results in inter-Center competition, vice cooperation, for limited monetary resources. This has resulted in side-effects such as the unwillingness of some Centers to share cost data and models with other Centers. Infrastructure is paid for through dollars allocated as a result of competition (aka full-cost accounting). Programs and research are competed among Centers. Program Managers who control the dollars are located at the "winning" Center, resulting

in Center-centric distribution of the spoils. Issue similarly applies to the "Lead Center" concept. A recurrent input was that competition between Centers is destructive. A possible solution proposed was to not have duplication of capabilities among the Centers. Some concerns were raised about the timeliness of funds released from HQ.

Quotes

- "When Centers have to compete with each other for funding, funding becomes the prize, and the Centers become adversaries in the contest."
- "The primary reason for the competitive, dare I say backstabbing, relationships between the Centers (even within the Centers), is money. I would love to help and be one happy family, but I can't support other activities if I don't have the resources necessary to just stay afloat. If all the organizations had some level of base funding that would keep the core organizations afloat, it would be much easier to live as One NASA."
- "Proposals with only one Center participating should be put at lower priority than those that have multiple-center participation."
- "All of the major program competition between Centers in the past has been destructive. There is more than enough work to be done if it were approached as a One Agency task that all Centers could bring their capabilities to."
- "Inter-Center cooperation has never been a problem at the level of the working researchers. By the time priorities (and funding) get to our level, the damage has already been done."

Theme #2: Funding of Projects

The lack of stability in project funding, both across years and within a given year, due to changing priorities. "Lead Centers" lead to parochial funding.

Quotes

"As long as you have one Center controlling the project funds that are distributed to other Centers, One NASA will not work fully."

Theme #3: Funding for Research

Funds are not felt to be allocated appropriately for research. Researchers feel they should be base-funded. Funding to supporting Centers is received indirectly through the Lead Center vs. directly from HQ. Lead Center funding for research results in parochial research funding selections. So does Center-level discretionary funds for research. Some NASA-only NRAs suggested.

Researchers would like to see a base level of funding to provide stability and avoid constant competition. It is felt that this will also allow successful multiyear planning. In research competitions (e.g., NRAs), it is felt that not all proposals are forced to include full costs (e.g., personnel, infrastructure). The recurring theme of competition as a disincentive to cooperation is raised again.

Quotes

- "As a research engineer I waste more than one-half of my time looking for and defending funding than doing real research."
- "Using highly successful, high-tech industries for benchmarking, dedicate appropriate percentage of One NASA's budget to IR&D investments."
- "It's hard to cooperate when you have to compete."
- "Basic research cannot be decided by Program Offices that have an inherently short horizon."
- "R&D funding needs to be independent of mission funding because the timetables are radically different, and because R&D money is the first to go when a mission hits a cost overrun. R&D 'NEEDS' to be a higher priority to NASA, or we will not have any new technology to draw on for future missions."

Theme #4: Lack of Travel Funding

Insufficient travel funding for collaboration, mobility, training, and project use.

The lack of travel funds is a prevalent concern. Collaboration across distance requires occasional face-time to provide credibility. The current methods of travel dollar allocation are inadequate. This is true for projects, research, and institutional service organizations.

Quotes

- "A science and engineering community HAS to be mobile to be cooperative and productive, and right now that would be impossible with current travel restrictions and the inability to add travel funds to grant proposals."
- "We live in an online age…but if you really want to get something done you sometimes have to 'go there'."
- "Even with weekly telecons and monthly videocons, the goal of creating a real unified team requires annual or biannual face-to-face meetings for collaboration to thrive."

Theme #5: Insufficient Funding (General)

Since the Zero Base Review downsizing process, NASA's resources have been reduced in the human capital and infrastructure accounts. Unless funding is restored, facility and human capital shortfalls will only get worse.

Insufficient funding for infrastructure, personnel, projects, and initiatives. Funds in areas that promote One NASA (e.g., engineering and software standards, associated working groups) are limited. A way to facilitate the sharing of unspent, year-end monies without being penalized in the next budget is desired. The overruns in NASA's missions are perceived to have caused other areas of NASA to be short-changed to make up shortfalls, thus causing friction between enterprises/Centers. There are not enough dollars in the NASA budget to support all of our missions, infrastructure, and personnel. This causes destructive competition for limited resources. A critical examination to remove unnecessary duplication and non-NASA mission-related activities is suggested.

Quotes

"When synergistic, complementary expertise resides at multiple Centers, but there are insufficient funds available to support work at all appropriate locations (either in reality or perception), 'survival' instincts set in and the organization that holds/manages the monetary resources keeps those to itself as a means of self-preservation, whether or not that constitutes the most appropriate/effective technical/programmatic choice. When this occurs, the result is contempt and distrust toward that organization on the part of the other potential contributors."

Theme 6: Inter-Center Funds Transfer

The processes associated with the transfer of funds from one Center to another are deemed to be prohibitively difficult. This inhibits the desire and ability to work together.

Quotes

- "I am a co-investigator on a small project for which the PI is at GSFC. Every year, transferring the money (~$60K) for our work from GSFC to JPL takes a ridiculous amount of effort on the part of the PI, myself, and various accounting professionals. This should be a standardized, simple transfer, similar to a transfer between bank accounts at any major bank, which can be done with a single phone call to an automated system."
- "The libraries try to cooperate for the purchase of some electronic materials, but it is very difficult to pool our money, i.e., transfer money to one center when the vendor will only accept payment from one Center."

- "Currently there appears to be R&D discretionary funding at the Center level, but none at the Agency level. This would greatly promote 'One NASA'.

Sub-Category: Infrastructure

Theme #1: Distribution of Funds

Funds are not allocated appropriately for infrastructure.

- Funding for infrastructure is spoon-fed to Centers, leading to poor financial cost performance.
- Much concern that we are losing critical infrastructure—that there should be equity in parceling out infrastructure funding.

The overwhelming response is that there are not enough funds for infrastructure and that the funding that does exist is not allocated appropriately. We are allowing infrastructure to decay in order to ensure there is funding for mission requirements. Sufficient funding to maintain and upgrade the existing facilities is a necessity. In order to adequately determine the correct percentage of the budget required for infrastructure versus enterprises, an Agencywide construction of facilities board should be instated. Infrastructure must be evaluated and funded separately from research, programs, and projects to allow predictable costs.

Quotes:

- "If we are to attempt to achieve consistency, reliability, etc., the sourcing for the NASA infrastructure must be common. It is encouraging to see the creation of the Asset Management Office. Please make sure the office's focus will be on consistency for the NASA Infrastructure."
- "Why can't the Centers be given a budget for Institutional Support directly from HQ, instead of having the Centers take the budget right off the top of the individual PI's program?"
- "Large wind tunnels are a national resource and should be supported directly as a line item in NASA's budget and managed by a single NASA team."

Theme #2: Eliminate Duplication of Infrastructure

Heavy concern lies in the understanding that there is a large amount of duplication of facilities and Center resources. This duplication produces competition rather than cooperation. We should stop building new facilities and seeking new resources at a Center when it already exists at another Center. To stop this waste of funding, NASA should review the needs and capabilities of facilities and equipment at each Center to find efficiencies between and within Centers. The information regarding all available test facilities should be easily accessible to everyone. Consolidation of Centers was also introduced as a means for better utilizing infrastructure and assisting collaboration.

Quotes

- "Decide which facilities are required for the Agency, nation's mission, and close the rest."
- "To collaborate use of facilities, rotate facility personnel and users to other Centers having similar facilities."
- "Develop processes that treat the Centers equally in terms of building/office maintenance and grounds upkeep. Some Centers have water fountains and Walt Disney World type landscaping while other centers can't afford to mow the lawns. Some Centers give employees large private offices while other Centers cram employees into bullpen arrangements. Respect is the underlying issue."
- "There is a Web site (http//facility.hq.nasa.gov) that at one time was an attempt to list all NASA facilities. Why build a new facility when one exists?"

Theme #3: Maintenance Management

The maintenance of all facilities and equipment should be standardized.

The tracking of facility preventative maintenance requirements should be improved by instating a standardized

Agencywide reliability-centered maintenance approach. In addition, the equipment custodian program should be centrally managed and not require dedicated custodians from each organization.

Quotes:

- "Parametric tools to forecast facilities maintenance needs and the amount of deferred maintenance and facilities conditions across NASA."
- "Graphical Information Systems (GIS) has the ability to enable geographic reporting and statistical standards for facilities, environmental security, etc. This would allow NASA to maximize cells of expertise that can contribute to the whole."

Sub-Category: Other

Exceptional Statements

The following represent many of the potentially exceptional ideas provided by the respondents.

- "The idea of a cross-enterprise technology program managed to leverage across common needs is a good idea. We must find a way to manage technology this way instead of allowing turf wars and power struggles to decimate our technology program."
- "I think a start at becoming One NASA would be to have One Center. Every Center has divisions and these divisions are expected to pay out of their budgets a variety of common expenses. The phone, and electricity, internet connections etc. are really just one bill. Pay the expenses first then divide the rest."
- "Centers with massive budgets can afford to invest in their own high risk/discretionary research. This discretionary funding needs to be open to all researchers independent of what Center they work at."
- "Many other federal agencies specifically allocate certain percentage of research AOs to internal use."
- "Each Center should set a budget and/or personnel quota for a percentage of resources that are devoted to One NASA. If a project has to spend [a percentage] of its budget for another Center's employee, it would presumably want a healthy collaboration so as to maximize return on investment."
- "Security systems across the Centers appear to be independent. A single security database would eliminate redundant background checks across the Centers and enable quicker access to each site's assets which are critical to the development personnel."
- "A Knowledge Management System, containing the specific skills, knowledge, abilities, educational background, and past project accomplishments of employees will allow managers to search for people with needed skill sets. For example, if I have a project related to nanotechnology, it would be helpful to me to search a database that will allow me to find out who, at other Centers, has experience in this field, what projects they worked on, and what results were accomplished."
- "…Perhaps a requirement that project and program managers, and all SESs be rotated every 3–5 years? Leave the experts, who are not generally interested in politics as long as they're allowed to keep working productively, in one location…."
- "NASA should develop competency-based prerequisites for assignment as project manager, and rigorously apply them at all centers, including JPL."

Category: Human Resources

The Human Resources category includes five subcategories. The subcategories include classification of people, rewards and recognition, mobility, training and development, and performance management.

Sub-Category 1: Mobility

Definition:

The ease of movement within Centers, between Centers, and between Federal and private industry. This included

mobility at a variety of time commitment levels from short-term travel to other Centers and/or conferences, to temporary rotations and/or duty assignments for a few months, to permanent transfers and job changes.

Theme #1: Permanent Center-to-Center Transfer Capability

The ability to easily move to new permanent career positions at other Centers.

Some comments acknowledged that transfers from one Center to another are occurring, but nearly all of these complained of administrative burdens associated with these transfers. Many comments recommended considerable improvements in an employee's ability to seek positions outside of their "home Center" and also for the Agency to consider creation of career paths across Centers. However, broad communication of opportunities, administrative burdens (badging, payroll, IT), and each Center's differences in their use of the CPP (Center only postings, different grades, etc.) were identified as disablers.

Quotes:

- "Transferring across Centers should be as easy as transferring within a single Center to maximize career flexibility and use of resources. You shouldn't have to be hired at one Center when you work for another."
- "Vacancy announcements limited to just one Center prevent free flowing career paths between Centers."
- "Make NASA into the equivalent of "One Company" provide an easy and equitable way to change employment from one Center to another."
- "Centralized career-field programs – creation of centralized career path programs per career field (e.g. engineering, scientist, resource management, contracting, etc.) that would formulate, coordinate and execute a civil service development program. Recruit and train interns. Identify, develop, and place high-performing employees in key positions throughout NASA. Allow program members to move from Center to Center within their career field."
- "I left LaRC. At the time of my departure I had to turn in my badge and close out my payroll from this installation. Arriving at HQ, I had to get a new badge and initiate payroll paperwork. It was like I was a new employee all over again. It should be seamless."
- "If a warranted contracting officer accepts a position at another Center, the person loses the warrant at the other Center and is taking a step back to contract specialist—even if the position at the new Center is at the same grade as the old Center. Contracting officers may be reluctant to move from one Center to another for this reason."
- "Few people want to move around but there is no way for the few who would move to sign up, particularly at the lower levels. Mobility would be a great help in keeping lines of communications open."

Theme #2: Rotational Opportunities

The ability for employees below the Senior Executive level to take short-term rotational opportunities at other installations to gain exposure to other NASA installations. Many comments acknowledged that there were already opportunities for some employees in specific developmental programs to seek one-year or less rotations from their home Center to HQ. However, opportunities between Centers or from HQ to Centers were seen to be lacking. Additionally, many felt these opportunities should be expanded beyond special development programs and to all levels of employees. Consideration of "researcher sabbaticals," "team rotations," and "job swapping" were discussed. While there were a few comments about making rotations mandatory for lower-level employees, there were many more concerns raised about the impact on established families and two-career families if rotations were mandatory. Also, there were many employees who felt simply increasing the ability to easily perform routine travel (a few days in duration) between Centers could

foster similar results to rotations. The need for extensive travel dollars to facilitate these rotations was seen as the primary disabler.

Quotes:

- "Currently it seems that serving in temporary assignments at different NASA centers is reserved for persons in the senior management levels and is seen more as a career ladder requirement, rather than as an opportunity to learn more about cultures and missions of different Centers. I believe that making regular six-month to two-year TDY or PCS assignments regularly available to engineers, scientists, and technicians, including those recently hired, at the lower levels of the hierarchy is needed to promote the One NASA concept."
- "If you want people to internalize One NASA they have to see all of NASA, instead of just one Center"
- "I've worked at NASA since 1977 and have never been aware of an opportunity for short-term assignments that would just allow personnel to experience working in another Center on a short term basis. Yes, this would entail some significant travel costs, but how else are NASA employees to really experience what is involved in walking in someone else's shoes for a while. There is a price for everything."
- "Employees work at the same field Center their entire career. Often the Center is not far from where they grew up or went to college. Over time, employees get so that they develop a sense of loyalty to the Center instead of the Agency."
- "Only HQ details are encouraged, but less to develop the employee than to make contacts and help the home Center expedite business."
- "Give sabbaticals to researchers to go live in another Center for a while and collaborate with researchers there."
- "In today's world, so many couples both work that moving people around will cause heartache within families."
- "Challenge each organization to reach development goals and rotation goals for a percentage of their people."

Theme #3: Temporary Center-to-Center Transfer Capability

The ability for employees to easily move to temporary career positions or duty assignments at other Centers. Many comments acknowledged the importance of temporary transfers in order to deal with peak workload issues within the Agency and that there were already some opportunities for employees to seek these temporary assignments. However, most felt that there was little to no communication on where these opportunities may exist or what skills were needed, and the administrative burdens of implementing these transfers often made them unpopular with their "home Center" management. Additionally, "loaning" employees were viewed by "home Centers" as acknowledgment of having more personnel than mission requirements, which would likely cause ultimate loss of FTE for the "home Center". Concerns were also raised about the impact on established families and two-career families if temporary transfers were considered mandatory. Also the need for extensive travel dollars to facilitate these transfers was seen as a disabler.

Quotes:

- "I work at Ames. I am just completing a four-month temporary assignment at JPL. I have been living in L.A. and working full time onsite at JPL with the Mars Science Laboratory Mission. This is the greatest enabler I can imagine."
- "Right now there is little positive benefit for trying to be mobile (especially on a temporary basis) and there is a lot of disincentives"
- "It is difficult to have personnel at other centers perform tasks for which they have a unique ability. Difficult agreements, money transfer, political issues, etc. get in the way"
- "The Temporary Change of Station (work assignments at another Center)…is widely considered

too expensive to be practical. Why is it too expensive? Because all the funds would artificially have to come out of restricted and limited travel dollars."

- "Moving JPL people in and out of other Centers should not be a problem, but often the contract gets in the way and places overly severe restrictions on the JPL employees, such as a restriction in the amount of household goods the person can move for a two-year assignment."
- "Centers are extremely reluctant to lend personnel to other Centers to cover workload spikes, exchange ideas, and work special projects."
- "Management says no because they are making a statement that they need more people and they can't justify more if they are giving away bodies —even if it's temporary."
- "If we are One NASA, then it shouldn't matter if one Center is over (FTE) allocation; if one Center is under, only the total NASA number should matter. Because our Center has been at its ceiling, we have not been able to fill critical skills even though there are folks at other Centers who want to come and do the job."

Theme #4: Increased SES level Personnel Transfers

Require all SES level personnel to have worked for a significant period of time at more than one Center. Most comments acknowledged that this has already begun to some extent with the recent senior Center management moves within the Agency. However, most felt that these should extend to all SES positions. Some comments proposed considering limits on tour of duty for SES positions at any location similar to DoD, but with more extended time allowances and exclusions of technical experts who benefit from focused long-term research opportunities.

Quotes

"Many senior NASA managers are born and raised at a single Center—mobility is needed for leaders at Centers to have a "Big Picture" view of the Agency and possess the One NASA mentality."

Exceptional Statements

There was a recommendation that all NASA contractors consider a central job posting Web site that would allow current and potential future contract employees more mobility for supporting NASA missions for which they are uniquely trained.

Sub-Category 2: Rewards and Recognition

Definition:

This subcategory includes recognition and reward of contributions, civil and noncivil, technical and nontechnical, and compensation.

Theme 1: Reward One NASA.

Reward those who demonstrate One NASA activities. You must reward the behavior you wish to receive. Those that demonstrate support of One NASA should be rewarded to encourage others to support One NASA activities. That which gets measured and rewarded gets managed. Those that demonstrate support of actions against One NASA should be disciplined. Collaboration across organizations and Centers was identified as a significant action demonstrating One NASA and should be particularly rewarded.

Quotes:

- "Reward the behavior you wish to encourage."
- "Specific rewards for individuals, groups, and Centers for bypassing personal gain for the overall good of the Agency."
- "Promote and reward highly those NASA employees who best embody the spirit and vision of One NASA. This action not only motivates these employees but builds motivation and loyalty to One NASA from other employees."

- "Provide real incentives to promote collaboration among people, organizations, and centers."

Theme #2: Merit-based promotions

There is a perception that promotions are not based only on merit and need to be.

Many people think that promotions are not based on merit or true ability to do the job. They feel too many promotions are based on reasons other than merit.

Quotes:

- "Promotions seem to be based more on woman or minority status rather than on experience/competency. A team that does not select the best talent will almost always lose."
- "Promote people that are qualified to do the job that the job calls for and not because of who they are or the so-called buddy system."
- "Promotion evaluation. This process has no credibility."

Theme #3: Consistent awards and promotions.

Awards and promotions need to be consistent across Centers. Currently, each center does it their own way and uses their own criteria. If we are one Agency, we should reward and promote consistently across the Agency.

- "All Centers should be treated equally in grades for like jobs, in buyouts, and in all personnel actions."
- "A common policy on NASA hiring and promotion requirements."
- "The extreme variation from Center to Center causes considerable pain. Employees know what happens at different Centers and when it is radically different from what is happening at their own Center it causes considerable unrest."

Exceptional statements

- "Establish a One NASA profit-sharing rewards system. Provide bonus pools for organizations/ individuals where savings and efficiencies are gained through One NASA initiatives."
- "Require some sort of Agencywide input for selection of management positions at centers."

Sub-Category 3: HR Classification

Definition:

Principally describes the treatment of contractors vs. non-contractors, but also included treatment of AST and non-AST. There are four main themes indicated in this subcategory. They are (in order of frequency): 1) contractor feeling not part of the NASA team, 2) contractor feeling like 2nd class citizens", 3) disparate treatment of e-mail addresses, and 4) disparate benefits.

Theme #1: Contractor classification

Respondents indicated contractor employees as being treated as not being part of the NASA team. Thirty percent of the respondents felt they were treated in a "them vs. us" manner.

Reasons for feeling not part of the NASA team range from being physically separated from the Civil Service employees to not having the same benefits, such as use of the Center gym or health services except in an emergency, as Civil Service employees.

Quotes:

- "Team concept is preached but not followed because contractors are consistently being reminded of their " subclass status" —contractor."
- "Obnoxious attitudes of civil servants—my contact point has gone out of her way to prevent me from doing my job in a proper manner, will only get cooperation when no one is around."
- "Separateness—feeling like you are not on the same team working for the same goal as everyone else—attitudes of civil servants to contractors."

Theme #2: Contractor classification

Respondents see contractors as being treated as 2nd class citizens based on the condescending attitudes exhibited by Civil Service employees. Additionally, respondents feel they do not get the recognition warranted by their work output. Instead, civil service employees get the recognition. Respondents feel left out of NASA processes, procedures, etc.

Quotes:

- "NASA attitude toward support contractors—a lot of the NASA civil service personnel still consider and treat support contractors as second class citizens rather than team members."
- "NASA contractors are treated as second class citizens."
- "Contractor vs. civil servant—contractors on most Centers are made to feel like second or third class citizens. This is not a universal attitude but is very prevalent."

Theme #3: Commonality of e-mail changes

Elimination of specific Centers from civil service employees' e-mail addresses but not respondents has caused respondents to feel left out and not part of One NASA. Some respondents felt slighted by change of e-mail addresses of only civil service employees. Elimination of specific Centers from civil service employees' e-mail addresses made respondents feel isolated, slighted, and not part of the One NASA team.

Quotes:

- "The One NASA e-mail sets apart civil servants from contractors."
- "Having e-mail addresses that differentiate between contractors and civil servants—isn't it ironic that this is done in the name of One NASA?"
- "Onsite contractors are EXCLUDED from One NASA; why are the One NASA e-mail addresses only for civil servants?"

Theme #4: Benefits accorded civil service employees vs. contractors

Disparate benefits accorded to contractors when compared with civil service employees. Respondents at some Centers are unable to use the exercise facilities, health center except for emergencies, and receive pay comparable to their civil service employee counterparts.

Quotes

- "Limiting One NASA benefits to civil servants only."
- "Contractors are exempt from many benefits which are offered to civil service."
- "It seems that at some NASA sites both contractor and civil service are allowed to use the fitness center. However, at other Centers … Langley, for one … only civil service personnel are allowed to use it. A lot of contractors would like this service."

Sub-Category 4: HR Training and Development

Definition:

Principally describes the type of training and development programs respondents felt were effective or required more attention/augmentation. There are two main themes indicated in this subcategory. They are: 1) Expanded Agencywide training such as MIP, MEP, PDP, or Web-based training such as SOLAR, and 2) basic or core standardized training given to all NASA employees.

Theme #1: Expanded Agencywide Training

Respondents indicated a need for increased Agencywide training that brings together employees throughout the Agency. A number of the respondents felt increased Agencywide training would facilitate the One NASA concept. Respondents indicated a need for Agencywide training through programs such as MIP, MEP, PDP, etc., or through Web-based training such as SOLAR. Respondents felt such training venues facilitate an appreciation for other NASA Centers, networking, and receiving the intended professional training.

Quotes:

- "SOLAR—one place for all NASA employees to receive training and resources."
- "Agency-level development programs—These programs bring people together from across the Agency in a shared experience—we need more of these at many levels."
- "Cross-Center management training—The MEP two-week residential experience at Wallops was my first in-depth working experience with NASA folks from different [NASA] Centers. Still memorable after 20 years."

Theme #2: Standardized Training

Respondents felt basic or core standardized training should be given to all NASA employees. Respondents saw a need for mandatory and consistent training of NASA employees in order to build common values and vision across NASA Center boundaries. Conducting multi/cross-Center training is the best way to break down Center-specific barriers and mind sets.

Quotes:

- "More unified training curricula offered across all NASA Centers including JPL."
- "Common Management Process—There is no HQ driven training standards…Although there are some standard criteria for project and program management, these criteria nor any formal training is required to be instituted at the Centers to ensure the best people are leading the projects/programs."
- "Process & Training Standardization—I think that every site maintains their own process specifications and few coordinate training. In some cases there are rifts between sites where one site disregards the others' processes and training even though the end result should be the same."

Sub-Category 5: Performance Management

Modifying position descriptions to include One NASA, holding people accountable for stated performance goals, consistent ranks and promotions, and promotions based on merit.

Three main themes in the data in this subcategory include holding people accountable for their assignments and dealing with low performers, adding One NASA to position descriptions, and consistent ranks and promotions.

Theme #1: Hold people accountable; remove poor/low performers

Many respondents feel people are not held accountable for their assignments. They feel there are many low performers that are never dealt with. This may be because so many have never heard of employees being disciplined or removed from service. There is a perception of much deadwood in NASA.

Quotes:

- "Continuous low performance is well accepted."
- "There is no threat of job loss no matter how poorly a job is performed, including not performed at all."
- "Problem, or nonproductive employees are moved from place to place, or simply left in place in ROAD status."
- "The Centers should incorporate President Bush's policy created for Homeland Security civil servants, which allows for greater freedom to fire workers who have reached their level of incompetence. Being a civil servant is a privilege and those incapable of contributing should be released from service."
- "There are too many civil servants and contractors that are just taking up space. Give these people meaningful work or let them go."
- "Consumer products are often recalled when they are found to be defective, but NASA managers are not, no matter how defective they are. Perhaps term

limits could be put into place – 3 yrs for branch head, 5 yrs for division head, 10 yrs for a director."

- "NASA needs to learn to keep good performers and get rid of those employees that do not perform. See Gore report, "Reinventing the Government." To my knowledge, NASA has never had a layoff. Low performers are simply shuffled from on program to another. US taxpayers end up paying more and more because NASA refuses to deal with low performers. To say NASA does not have any low performers is ridiculous and self-serving and no one believes it. Other government agencies and private companies do this to ensure stakeholders get the most for their investment. NASA should remove the statement, "no workforce reductions" from the One NASA flyers, it appears very arrogant and self serving and costs taxpayers more."

Theme #2: Consistent ranks and promotions across the Agency

Also in this HR subcategory, a significant amount of respondents feel that grades are not consistent across the Agency and promotions are not given consistently across the Agency.

Quotes:

- "Centralized promotion management for grades 14 and up. Centralized NASA-level promotion boards twice a year for grades 14 and 15 would remove local biases and prejudices from promotions. The board should consider all eligible for promotion and allocate promotions to those best qualified, not simply a local director's favorite. Currently, local reviews and directors can secure promotion or withhold promotion on a whim."
- "I transferred from KSC to DFRC and found that Dryden was nothing like KSC in HR procedures and practices for dealing with employees, especially the promotion process."
- "CS employees can differ by one GS grade between Centers for identical capabilities/accomplishments."
- "There are currently no consistent Agencywide procedures for hiring and promotion."
- "One NASA would mean equal work tasks are performed by equal grade employees."

Theme #3: Position Descriptions

One NASA should be put into Position Descriptions and measured and rewarded. One NASA criteria should be added to employee Position Descriptions, especially those of SESs. Many respondents felt that if it was added to PD then it would become a reality. After all, you get what you measure and reward.

Quotes:

- "If the Administrator wants One NASA, the performance criteria should be in every SES's performance plan and integrated into our NASA Strategic Plan/Performance Plan. This should then flow down to Enterprise and Center plans."
- "If momentum is not kept behind the One NASA vision, it will not succeed. It should be added to the position descriptions of high-level managers so that they are obliged to keep the stew cooking."
- "I will take One NASA seriously when my performance rating depends on my participation."
- "Each person's job should be viewed with One NASA in mind, defining the purpose of the job to support goals of the organization at one's center and other centers as well."

Theme #4: Rewards and promotions

Also in this subcategory, many respondents feel that rewards and promotions are based on reasons other than merit. They feel people being selected for jobs are not the best qualified and are selected for reasons other than merit such as favoritism or minority status.

Quotes:

- "Promote on merit, not on other factors."
- "While workplace diversity is a good thing, in highly technical areas, it should not be valued higher than qualifications."
- "NASA is historically an agency run by an "old boy" network. A person gets into power and starts appointing all of his or her cronies into important management positions. Some may actually be good managers, but most are not."
- "The CFO must stop promoting based on sex and gender before there will ever be One NASA. It is obvious that most promotions go to females and minorities."
- "Affirmative Action has been distorted to the point that it effectively places less-qualified people into high positions. Typically the education and experience of other qualified people are overlooked for the sake of advancement to meet the numbers for the quota system. Highly educated and experienced people do not perform well when their supervisors are just place holders for the EEOC game being played in the government. While businesses have the luxury of selecting many qualified minorities from vast fields of people graduating from various schools of the arts and sciences, NASA tries to meet these quotes by drawing on engineering classes which typically do not attract minorities and women. We now have replaced our heavyweight engineers of the past with counterfeits, leaving NASA open to vulnerability for contractors taking advantage of our weakened oversight abilities."

Exceptional statements

Open job announcements to Agencywide instead of just within that Center; this would require removal of Center FTE limits and focus just on Agency FTE limits. Have a central group select and this would build consistency.

Category: Business Practices

Subcategory 1: Badging

Theme #1: Universal badging system—"common" or "smart" badge that is accepted across the Agency for both NASA and contractor employees.

One badge for all employees and contractors will enhance the ease of travelers to all NASA installations and will foster a One NASA atmosphere

Quotes:

- "Badges recognized at other Centers—an exceptional idea for travelers. I had always wondered why you needed special badging at other Centers if you had already undergone the security process through your home base."
- "Contractor badge recognition—this has become a divider instead of a unifier. Standardizing badge procedures across the centers so that a badge at one Center works just as well at another was a great idea. Limiting it to only civil servants only served to further alienate the large percentage of contractors in your workplace. Extend it to the contractors who went through background checks and fingerprinting just like everyone else."
- "When it is necessary for JPLers to interface at other NASA locations, our different badge and necessity to get a visitor's pass make it clear there is not One NASA"
- One NASA …"O'Keefe is doing most to convince people of this. By changing the e-mail addresses to nasa.gov, by making sure that NASA badges can get employees in any NASA Center. These types of activities that will convince employees that One NASA is serious. O'Keefe believes in it. Now that belief and passion has to filter down to the Center Directors and other managers."

Subcategory 2: Business Practices—E-mail

Theme #1: Common E-mail System

Based on the data, individuals would like to have an e-mail system that can be utilized efficiently and effectively whether they are at work, on travel, or at home with the ability to transfer large electronic files. It is felt by some that a common e-mail system sends a message that Agency leadership is serious about One NASA by implementing this system and process.

Quotes:

- "E-mail portability—it's a general complaint. Different servers, multiple ways of accessing remotely, etc. I want one e-mail address accessible anywhere, anytime, home office, on the road"
- "Each Center has different e-mail attachment size limits (incoming and outgoing)…"
- "Most other government organizations use only one e-mail system and address code
- But, based on the data received in the One NASA survey, the change to NASA.GOV e-mail addresses appears to be not well accepted due to:
- Perception "nasa.gov" was required without much thought and input appears "gimmicky" and done for One NASA only.
- Center designation useful to determine location of person, time zones, etc.
- Lack of aliases in new system(s).
- Problems encountered by people who use nicknames or need –1 after their names
- "One NASA e-mail change—Please complete it, but do so correctly. Allow aliases other than the Firstname.I.Lastname that work with the nasa.gov ending, such as Firstname.Lastname or Nickname.Lastname. Then no longer allow the old addresses to work (such as center.nasa.gov) but also include contractors in the One NASA family. With civil servants using nasa.gov and contractors using center.nasa.gov—there is too much confusion!"
- "Leadership set the example—If leadership gives policy on e-mail naming convention, they should set the example by following it"

Theme #2: NASA Employees and Contractors

There is a concern that contractors are not really thought of and included as part of the NASA team.

Quotes:

"Unified email addresses—A common email address ('xxx@nasa.gov') for everyone at NASA Centers including contractors. Excluding contractor employees engenders a "class system" culture at NASA and is counter to the One NASA principals. Other federal agencies using unified e-mail addresses do not force such distinctions"

Subcategory 3: IFMP

Theme 1: Common Financial System (such as IFMP)

The responses strongly support the need for a common financial system. Consistency of processes and practices across the Agency will serve to increase productivity while reducing the need to learn new systems each time an employee changes projects or positions. There are many skeptics regarding the success and efficiency of the new IFMP. It is recommended that the design, development, implementation, and training of any new financial process should include input from the employees that will be using the system.

Definite need for a common financial system that includes the following functions: budget process, payroll, timekeeping/webtads, full cost accounting, travel, financial reporting, resource management (personnel), accounting system and procedures, and easy transfer of money between centers.

Quotes:

- "Lack of full-cost accounting for human resources on projects—Project managers do not have the information to make effective decisions that can lower cost. Civil servants' costs are not directly charged to projects. Instead, Center, directorate, and division "taxes" can consume one-third to one-half of a project's funds with no accountability."
- "IFMP—Much Needed. Thanks for the hard work of keeping this in front of us. It's painful now, but will make a big difference for us all."
- "This system will help set standards across the Agency. Through communications with other Centers, we are able to learn from each other and make this a more efficient system."

Theme #2: IFMP not working properly

At the time of the survey, the first wave of the IFMP Core Financial had been rolled out. As with any new system, working through the kinks can be painful. There were many comments voicing the frustration of this first phase of implementation. Respondents indicated that the systems is flawed, it is schedule driven, user unfriendly, too complex, learning curve to high, and that employees lacked adequate training. Adequate time should be allowed to implement the system and train the personnel using it. Although a schedule is important, perhaps more time should be allowed to reduce the burnout of employees.

Quotes:

- "IFMP Training—There is very little information available even to those who are very intelligent and searching hard to get straight answers. Don't force this transition until you get your act together in providing adequate training materials and human trainers. Get one person in each group or branch adequately trained with a human trainer so they can train and help others in their organization make the transition. Do this before the transition, not during it."
- "God, I hate this program. The training has been next to useless and the schedule is not very well thought out, but again, it is an example of commitment."

Theme #3: Culture change required for successful implementation of IFMP

Implementing a common financial system is an important step in unifying the Agency. But as with any process or system, it is only as valuable as the people who use it. The culture of NASA is imperative to its' success. We are asking people to change the way in which we work. They must be able to recognize the benefits to adopting that change. We can no longer tolerate Centers competing with each other for program funds. The Agency must encourage (and reward) collaboration instead of competition and integration instead of isolation. IFMP is an enabler; it will be up to our workforce to take full advantage of its benefits.

Quotes:

- "IFMP is being sold as THE solution to agency management problems and inter-Center budget issues… it is being OVERSOLD. It is just a tool, in itself, it won't change the way we operate—fundamental core values (Center vs. Agency) need changing"
- "Benefits—Instead of motherhood statements, give employees the specific benefits realized by each initiative so that worker can see that it is a good thing. IFM has made my job less efficient, but I know it has benefited the Agency with their credibility with OMB—I am trying to reach the worker with this message but it is a challenge"

Subcategory 4: Engineering Practices and Procedures

Theme #1: Common Processes and Tools

Commonality is a dominant theme throughout the engineering practices and procedures. The areas that would benefit from commonality range from design tools to

software procurements to hardware development. Standardizing policy and procedures will allow contractors and civil service to work more productively on programs that span multiple Centers.

Quotes:

- "Standard processes and procedures across Centers—As an example, each of the Centers have their own requirements for qualifying flight hardware. Each Center seems to think that their testing requirements are the best. The hardware is affected by the same environments. There should be no reason why NASA HQ should not take a leadership role and come up with a standard for qualifying flight hardware."
- "Currently there are computational tools that Ames and Langley have that aren't shared across the Centers because of Center ownership issues. If we are One NASA, why can't we send Langley source code to NASA engineers at Ames and why can't Ames source code come here? NASA needs to remove the tool barriers which currently inhibit or prevent tools to be used across NASA, which results in wasted effort through duplication."
- "Common database of specialists—From a technical perspective, it is often difficult to locate groups or individuals by specific specialties at the various Centers. A common database of the focus of various working groups would make it much more efficient to find appropriate contacts, etc."
- "NASA-wide technology prioritization—A multi-enterprise process is needed to describe and prioritize technology pull areas including a strategy for proposal submission and team building."

Theme #2: Collaboration Capability

Collaboration among multi-Center teams will increase productivity and reduce costs. Collaboration tools should include engineering environments, virtual meeting spaces, and communities of practice. Access to information should be shared and available to those who need it, when they need it, thereby removing the barriers of organization, time, and space. Collaboration allows us to spark innovation and develop more expedient solutions.

Quotes:

- "Collaborative Engineering—Enables models/simulations at various Centers to communicate and exchange data/results."
- "Cross-institutional Design Capability—Concurrent spacecraft and component design methodologies should be NASA-wide architecturally so that collaborations are inexpensive and efficient."
- "Full Access to Internal Information—Each Center has a lot of information on its internal web sites. This information is typically behind a Center firewall such that you can't access internal information if you are at another Center. Somehow the Agency needs to create an architecture that allows any NASA employee to access the internal information for employees wherever it is within the Agency."

Theme #3: Program/Project Management Improvements

Program management tools, common processes, and consistent reporting methods are needed to improve the efficiency and effectiveness of program management. It is recommended that 7120.5B be applied consistently and with greater discipline. It has been noted that the current program management environment at NASA does not foster inter-Center collaboration and that a lack of trust exists between Centers.

Quotes:

- "Common project repository—A centralized, Web-searchable repository of project information, so that efforts can be reused for increased efficiency. NASA cannot afford to pay twice to solve the same problem."
- "Program and Project Management Tools—Large companies often have their employees use common

tools so that work strategies and practices unify. Project management is the lowest common denominator for work integration."

- "Program/Project Reviews—All Centers have programs and projects that proceed through a common set of reviews, yet these reviews are conducted in different ways (even within a Center). Provide a common and consistent definition of each major type of review—SRR, SDR, PDR, CDR, etc. Provide a common and consistent plan template for each major review, describing how to conduct the review, the type of products to include, and the basic objectives. Pro-vide standardized tools for document management and RID processing."
- "Program Management at Centers—The management of programs at Centers cannot help but to disable One NASA by its very structure. It actually requires Centers to behave autonomously while competing for resources and other support to achieve their program goals, not the Agency's."

Category: Culture

Subcategory 1: Contractors not treated equally

Definition

In addition to contractors being treated as second class citizens (the most recent and most mentioned example of this is the exclusion of contractors with the One NASA e-mail), JPL employees are not treated as equals with the other Centers and JSC employees are seen/perceived as being superior to all other Center employees.

Quotes:

- "Policies on contractors (separate facilities)—Contracting out is a way of life—contractors provide expertise in some areas. But in the services contracts, we place barriers in the way of effective communications. Contractors must wear their own badges (good idea), be excluded as a group to certain areas or offices (bad idea). Our services contractors often feel isolated and are not considered a part of the team."
- "We spend an awful lot of money just building walls to separate contractors and give them their own rooms or areas. This just stifles effective communications and the feeling of being involved. The big threat is the perception of personal services."
- "This is rare and can be identified by an effective CO or COTR or Manager without having to segregate the workforce. If the only time we see each other is at meetings, we will never be a true team or develop that team feeling."

Subcategory 2: Funding approaches disable One NASA.

Definition:

The recommendation here would be to create multi-Center projects that require collaboration. One common theme throughout this category was the Center against Center competition for resources that encourages the current "divide the pie" mentality that hinders One NASA. A change in this area is required for success. Emphasize the numerous collaborative opportunities that exist now that aren't being taken advantage of and make more internal collaboration tools available to employees. Develop an Agency catalog of capabilities. More One NASA projects. More NASA-wide conferences and interchanges (technical workshops, technical interchanges, technologist retreats, etc.). Multi-Center proposals.

Quotes:

- "Money. We are constantly offering to the administration a lowered budget to do the same amount of work. I know that is the political environment, but it pits Center against Center for the limited resources."

Subcategory 3: Internal Politics / turf battles

Definition:

There were significant references to unhealthy inter-Center competition. It is hard to cooperate when you have to compete for survival. Competition for tasks tend to polarize Centers, and brings distrust to the table. Eliminate the Lead Center designations which tend to encourage competition rather than collaboration between the Centers. Political barriers— both external and internal—are major hurdles and divide the Agency.

Quotes:

- "Clearly define roles and eliminate competition. It is not possible to have One NASA and to have the level of competition for funding that currently exists."
- "Cooperation among Centers. Currently much animosity is generated between Centers due to direct competition for funds. Funding should be handled in a different fashion to prevent this."

Subcategory 4: Eliminate Congressional Earmarks.

Definition:

"Earmarks place the needs of the Center over the needs of the agency." "Congressional people earmarking their own personal projects that would benefit only their district." "Political earmarks and involvement of Congress to settle internal NASA conflict. Local interests prevail over national strategy."

Quotes:

- "Balance between Congressional delegations and the One NASA concept. There must be a balanced approach to establishing the One NASA initiative where Centers are encouraged to work together because they are all comfortable that good work will be there no matter who manages the effort. Congressional delegations dilute that cooperation by back dooring for additional earmarks and work for their particular Centers. There has to be a system set up where it minimizes the influence that Congressional delegations can have in disrupting the One NASA philosophy."

Category: Communication

Subcategory 1: Internal

Theme #1: More Communication on Center Roles and Missions

Employees desire to be better informed on other Center roles and missions—timely newsletters and easily accessible Web sites were requested along with additional travel funds to permit more face-to-face communications.

Quotes:

- "Each Center has its own periodic newsletter that keeps employees abreast of what is happening at their Center. Why isn't there a NASA-wide news paper distributed at all Centers using content from the existing Center newsletters to help employees better understand what is happening at other Centers?"
- "Perhaps there could be a 'Today (or This Week) at NASA' bit that would have the top news from each of the NASA Centers. Visitors to the Web site could find out what is happening all over the Agency at a glance. Maybe it would be an e-mail list people could sign up for. I have always liked the JPL e-mail list and I am glad that I signed up for it. Even though my job doesn't deal with interplanetary exploration, it is fun to keep up with the news. There are a lot of good mailing lists like that out there (our media news list) that I don't think people know about. Other government organizations do it."

Theme #2: Employees desire that NASA foster more collaboration.

They desire more sharing of information, expertise and facilities, i.e. unrestricted technical databases, Web access to all Centers, employee conferences and workshops, Agency-wide skills and facilities databases, compatible and more sophisticated communications tools, and a Web-based NASA-wide orientation for all employees, etc.

Quotes:

- "Each Center has many ongoing projects/activities that would be beneficial to each other. A common accessible database with points of contact would strengthen the agency overall."
- "We still have too many employees who are too protective of what might happen if they share their job knowledge. In other words, they are afraid of losing their own position if they share their knowledge with others. Until we are all willing to work as a team, it is going to be difficult to have One NASA. Employees need to be persuaded to share their knowledge and abilities with others to make it a real team. I don't know if this is even possible."
- "Some NASA databases have Center-only access restrictions. When searching for information, access to information within NASA databases is essential. One NASA will assist in making database information available/shared on a controlled basis (i.e., registered users and passwords) to all NASA Centers."

Theme #3: Inter-Center communications need improvement across each NASA Center.

Quotes:

- "Even at a single Center level, there should be a Web site load of easy to find technologies, science, and application…data could be broken down by groups."
- "The major obstacle I see to One NASA is the general ignorance of what we do (capabilities) even among ourselves. That's lack of communication and organization."
- "Our little office has as its purpose to foster communication among organizations at our Center. We host a detail opportunity where other employees can get experience working at the Center-level than a branch level to give them a bigger picture. Agency opportunities can be offered at an Agency level. For example, the Center people who are working on the IFM project at the Agency level now have a more Agency-focused perspective."

Theme #4: Communication by senior and middle management to working level employees needs improvement.

Quotes:

- "Plans, processes, goals, short-term impacts, etc. should be regularly and widely communicated to ensure that the NASA population does not focus on the short-term negatives, but instead longer-term positives."
- "Two-way communications is critical to good decision-making. Especially for major decisions such as the creation or cancellation of a project, those making the decision should meet and communicate with those affected."

Subcategory 2: External

Theme #1: NASA does a poor job of communicating the excitement and overall relevance of its activities to the public.

Under this theme, survey respondents expressed strong comments on the powerful ways that NASA contributes to this Nation's overall economic and educational capabilities. Unfortunately, the Agency does a poor job in conveying its world-class products and services to the American public. In addition, the inability to properly communicate the NASA mission detracts from our opportunity to show

how relevant we are to today and tomorrow's commercial and educational needs.

Quotes:

- "I hate going to a party and hearing that NASA cynic go on and on about the problems with NASA. You can't convince them otherwise no matter what you say period. We need something awe–inspiring to help us with the NASA image—something patriotic, daring, exciting. Something to wake Americans up. We do things everyday at NASA that are awe-inspiring. We need to package them better to show Americans what they really do get for their money. Advertise better and advertise more when we have a big launch. It used to be something to watch the Shuttle and it still should be. Maybe it is the teacher in space idea; maybe it is flying a plane to Mars. Whatever it is, we should feel pride in this American agency again. Americans need to be educated about NASA constantly."
- "Each Center is concerned with its own processes and outcomes. NASA does a POOR job of promoting its successes, launches, and what it does for the average man on the street."

Theme #2: Educational and community outreach programs should be emphasized and better coordinated and integrated Agencywide.

As this Nation seeks to find new ways of inspiring more students to enter science and math disciplines, NASA needs to improve its public outreach activities across this Nation. With a limited set of resources, it is critical that all Agency educational priorities and goals be addressed with a consistent voice across all NASA Centers. Using simple, consistent themes, we can continually educate our customers and the general public on the opportunities that NASA offers this Nation.

Quotes:

- "An old idea that's time may have come again—get NASA education specialists, scientists, engineers, and technicians to spend a week in a metropolitan area providing all sorts of programs to involve schools, industry, and science museums. This is great media exposure—works best when pre-and-post activities are used to reemphasize content provided by Agency representatives."
- "Creating a consistent look for all NASA affiliated educational outreach projects. When there are multiple NASA resources presented and displayed, it gives the perception of a divided NASA."
- "Implement a "NASA Summit" that travels to selected areas where NASA representatives visit cities and conduct presentations and display exhibits at museums, schools, chambers, rotary clubs, etc. ALL Centers should be involved in this effort and not have Center-specific messages, but talk to the people about the overall efforts that NASA is undertaking. Educate them on how they are benefiting on a daily basis from these efforts to inspire them. A summit like this could cover all types of outreach/advocacy from public to education to minority to Congressional groups."

Theme #3: Better Information on Accomplishments

Employees should be kept better informed of Agencywide accomplishments to date and on technology spin-offs so they may serve as ambassadors for the space program to the public and external customers. Throughout the Agency's five enterprises, 10 Centers, and Corporate Headquarters, mission success stories are not equally shared throughout the Agency. With today's technology, NASA has the capability to keep its 18,000+ civil servants and 50,000+ aerospace contractor partners on the accomplishments and spinoffs that this Agency produces every year. Even more important, the legacy of past achievements should be linked to current future NASA endeavors. Educating

our workforce on what we do and having them share our successes with their family and friends makes for a stronger NASA.

Quotes:

- "Very few people in the general public realize how much space-derived technology has improved our daily lives through spinoff technologies. The average NASA worker often only thinks of Tang or Velcro —even though these aren't space spinoffs! With all the medical, consumer, environmental, material, industrial, computer, transportation, and safety spin-offs (some 30,000) that have come about through space exploration, it would be great to feature training modules on space benefiting earth. Or again, every NASA publication or daily news item could feature a spinoff of the day or week detailing exactly from where the technology came and how it has benefited life on earth. I challenge anyone to find another government program that has done more to raise the world standard of living than NASA. We are an investment, not an entitlement program, and with technologies stimulating $7 economic growth for every $1 invested in the space program, we have a lot to be proud of. Encouraging employees to be fully aware of the space heritage benefiting life on Earth would greatly assist us in answering friends, relatives, and the public who consistently ask "Doesn't it cost too much money for us to send astronauts joyriding in space?" Arm your employees with the knowledge to let people know about benefits of space exploration, and you can't ask for better public outreach, relations and education."
- "This ties in with appreciation for our strong NASA heritage. When I was a little girl, I loved NASA because of what it symbolized and what I knew it gave to humanity, not because I liked one project in particular at one specific Center. I know numerous employees that have no idea why we are even bothering to explore space—it is just a neat job to them and a good way to collect a paycheck. For those employees who are not inspired by space exploration itself, it seems really important to get the point across of what exactly we are doing and why as well as what our future goals and why…."

Exceptional Statement

"Communications Strategy—We (NASA) need a comprehensive communications strategy and viable plan for implementing it. The overall goal would be to capitalize on every opportunity to effectively articulate the relevancy of NASA-unique capabilities and contributions to the American people and to the National leadership to ensure their understanding, appreciation, and support of their Space Program. This should be a communications plan for all of NASA, not just a public affairs plan for Code P, although Code P should lead the effort. The primary users would be the NASA leadership and their staffs/personnel, not just Code P or select individuals. Therefore, it would provide a basis for Headquarters, Programs, and Centers to conduct balanced and effective communications programs whether communicating with audiences inside or outside of NASA. We talk about getting our message out, staying on message, etc., but what is the message and who is the audience? We should at least be singing off of the same sheet of music, if not always in harmony, more quickly if our messages were derived from our (NASA's) vision and mission statement. Why reinvent the wheel?! Also, we should know what audience we are singing to and why. Singing in harmony off of the same sheet of music won't have much effect if the audience isn't listening. Also, such a plan would facilitate focusing/leveraging our limited resources so that we get the best bang for the buck."

Category: Individual Actions

Four common themes emerged from the seven subcategories:
1) Visible management commitment.
2) Efficiencies/standardization.

3) One NASA Awareness, Acceptance, and Commitment top to bottom.
4) Expand inter-and intra-Center Communications and Collaborations.

Subcategory 1: Individual Responsibility and Accountability

Definition:

Employees should take responsibility for their own actions and for bringing to the attention of management things that need to be done, e.g., need better tools, software, etc., process improvements. Hold yourself and others accountable for demonstrating One NASA behavior and decision-making. This includes speaking out about these issues. Also includes holding people accountable by their peers, superiors, and direct reports.

Theme #1: Management support and leadership

The support for the One NASA process needs to begin from the top. If employees see the management commitment they will follow suit. Management needs to be honest and keep everyone involved. Listen carefully and encourage discussion.

Quotes:

- "If our management does not stress that it is important, then nobody will think it's important."
- "Show by example that it's WE and not us and them…Don't ever allow someone/anyone else to fail due to inaction on our part."

Theme #2: Process/policies integration, standardization, reevaluation

Need to take a hard look at all processes and policies and reevaluate the need for them. Integrate or require interoperability of systems.

Quotes:

- "Following unified documentation system will make us easily work together, reference each other, and minimize misunderstandings."
- "If NASA is to be one team, the processes for accomplishing work must be unified and driven from HQ down. Each Center manifesting their individual methods of accomplishing similar work must end, and a proven efficient method, where available, should be promoted"

Theme #3: Individual responsibility, accountability and commitment

We each need to take responsibilities for evaluation of how we perform our jobs and find ways to improve our performance and the performance of others. Each employee must seek ways to educate themselves on the Agency changes and share ideas to try to solve problems encountered.

Quotes:

- "Become a true civil servant and perform our duties wherever this duty leads us."
- "Look at our jobs in the way they relate to the rest of the system. Can one hour of work on my part save 10 hours of work on another discipline, organization, or Center?"

Subcategory 2: One NASA Attitude

Definition:

Approach decisions with a One NASA attitude with attention to corporate results. Approach decisions with a One NASA attitude—one that values the benefit and goals of the Agency over those of individual organizations. Put the interest of NASA above that of self and local organizations. Make decisions based on what is best for NASA. Don't hang on to a certain way of doing things just because you want to maintain power or control, etc. Be open-minded and willing to accept change. Accept the fact that changes are bound to happen and are good for the long run.

Rather than being critical, be supportive of changes and work on how things can be done better instead of focusing on why we should not change.

Theme #1: One NASA Mindset

Be open to and accept change, commit to One NASA. Think and act as one Agency, not individual Centers. Discourage competition, encourage collaboration, recognize and reward One NASA behavior.

Quotes:

- "If you don't believe, you can't achieve."
- "Each employee should make decisions in terms of the good of the Agency as a whole rather than what is good for their particular Center."
- "Stop looking at other Centers as competition and start looking at them as partners."
- "When in the Navy, I never said I work for Norfolk Naval Base, I always stated that I was in the Navy."

Theme #2: Efficiencies/Standardization

Minimize duplication of capabilities, smartly assign work to get best value.

Quotes:

- "Identify and remove redundant NASA/contractor functions."
- "Duplicate functions should not be considered a waste. Mechanisms need to be fostered that will let duplicate functions cooperate."

Theme #3: Visible management commitment

Management must set clear vision, realistic goals, then consistently pursue them. Need tangible results to prevent nay-sayers and middle managers from ignoring One NASA.

Quotes:

- "NASA top leaders make One NASA decisions and lead us in that direction."
- "Top management at each Center needs to preach and practice One NASA."

Subcategory 3: Education, Vision, Mission, One NASA

Definition:

Educate yourself on NASA Vision and Mission and One NASA. Increase your awareness of the big-picture Vision, Mission, and goals of NASA. Become aware of how you and your work fit in the big picture. Increase self-awareness of One NASA—It is an employee's responsibility to fully familiarize themselves with the concept of and actions that demonstrate One NASA. This would include appropriate training classes as necessary, and participation in One NASA related activities and efforts.

Theme #1: One NASA Process

One NASA must become a regular business process with a clear definition and schedule for rollout. Programs must be made available where the focus is the integration of NASA resources and talent. Encourage others to participate in such programs.

Quotes:

- "To date the administrator has been unable to explain what One NASA is. Until he is able to do that nothing else really matters. We all assume it is simply one more HQ religion of the month. We poor folks at the Centers do not know everything, but we do know that if you cannot define something, you cannot implement it."
- "Explain and promote the understanding of the One NASA concept. Explain the benefits."

Theme #2: NASA Mission

NASA management needs to develop a broad NASA mission with a tangible purpose and specific responsibilities. The goals must be clear and concrete, yet challenging.

Quotes:

- "We need to take the time to understand what NASA's charter actually is; how we fit into that charter and how other Centers fit into it."
- "Develop focused goal for NASA. If any Agency in the government needs a goal, it's NASA. Stop being fearful of making a commitment to go somewhere…"

Theme #3: Awareness

One NASA should start with the understanding that we are ambassadors inside and outside of the Agency. We are the tools and the means to educate others, but we have to start by becoming educated ourselves. Contribute to the community and make sure the press understands the ONE NASA process.

Quotes:

- "All employees should be familiar with the scope of the NASA Centers and what they do."
- "Explain One NASA to the press. Make sure that the press, especially local press, understand the implications of One NASA and avoid headlines such as "such-and-such center to lead such and such program."

Exceptional statements

- Create a NASA-wide symposium

Subcategory 4: Knowledge and Communications

Definition:

Increase awareness of others' capabilities and communicate more with those at other Centers. Increase your awareness of capabilities of other individuals within your organization and those of people at other Centers at least in your broad technology area. Take/make opportunities to communicate with those at other Centers. This could include solicitations for information, helping with benchmarking, offering to help other Centers, or communicating information of a technical nature such as that in technical papers.

Theme #1: Catalog each Centers capabilities and make it available to everyone

Benchmark capabilities at each Center and some successful projects. Establish a database with a central directory of available services across the agency. Foster more sharing of best practices and lessons learned.

Quotes:

- "Education regarding what is technically available at the other Centers."
- "Most of us have only a cursory knowledge of what is done at other Centers. Learning more details of projects at other Centers may lead to more cross-Center projects."

Theme #2: Expand communications

Expand inter-and intra-center familiarity and communication thru tools and policies (Web sites, newsletter, teleconferences, increased travel to other Centers, inter-Center symposiums and conferences).

Quotes:

- "Either read up about the other Centers, talk to people at the other Centers, or travel to the other Centers to see first-hand their capabilities."
- "Sponsor inter-Center conferences for the various disciplines within NASA."
- "Communicate capabilities of each center to other centers to enable sharing of resources and key skills."

Theme #3: Grow more inter-Center relationships and collaborations

Quotes:

- "It is easy to demonize someone who you do not know. It is easier to cooperate with a friend."
- "Form at least one new collaboration with a person or group at another NASA Center."

Theme #4: Include contractors in the knowledge and communications effort

Quotes:

- "As a contractor, I have very little information as to the capabilities that exist at other facilities for performing the type of work that I do. I want more info on where they can help me and I can help them."

Exceptional Statement

- Send new NASA employees on a tour of all NASA locations over their first year.
- Allow all Centers to access all other Center's intranets (contractors too?).
- Establish a knowledge database of people like RSIS "Birds of a Feather" or Boeing "Ask the Expert" e-mail system, so when you have a problem you can check the database and e-mail others for assistance.
- Create one Web site where all projects in a particular topical area are listed.

Subcategory 5: Mobility

Definition

Actively seek out and engage in participation in job opportunities at other Centers – both temporary and permanent ones.

Theme #1: Cross-training/cross-fertilization

Implement a cross-fertilization program for employees. The cross-fertilization can be implemented by classwork and/or by collaboration among different enterprises, Centers, and Agencies.

Quotes:

- "We need cross-training. No one should become an AA or SES unless they have spent more then 12 months at another Center…"
- "Personnel in one enterprise are not familiar with personnel in other enterprises. This lack of understanding may impede some of the goal towards One NASA. Allowing some cross-training and collaboration among different enterprises may foster a better spirit of cooperation among different Centers"

Theme #2: Relocation, temporary assignments

Provide strong incentives to encourage relocation, temporary assignments, Center-to-Center transfers, detail assignments, etc.

Quotes:

- "Actively promote service time at multiple Centers as a requirement for senior management positions."
- "Make it easier and desirable for staff to work at multiple Centers during a career at NASA."

Theme #3: Visitations

Establish opportunities for visits to and from other Centers. The visits could result in more collaboration.

Quotes:

- "If you are aware of work similar to your own being done at other NASA centers, request or take opportunities to visit those Centers and familiarize yourself with that work, the people doing it, and opportunities to collaborate."
- "Training or visits to other centers to gain knowledge of the work conducted there, the expertise, the people would help promote One NASA"

Sub Category 6: Teamwork

Definition

Teamwork, intra-and-inter Center. It is an employee's responsibility to demonstrate the behavior that exemplifies teamwork. This would include their inclusion of civil service peers, contractor teammates, and academic partners. Participate in inter-Center teams to the maximum extent possible. These include proposal evaluation teams, project teams, tiger teams for initiatives, etc.

Theme #1: Communication

We need to take the time to share knowledge and reward those who share and improve performance as a result. Encourage open and honest communications without fear of reprisal or ridicule.

Quotes:

- "Look for opportunities to share rather then seclude. Provide funding to allow cross-Agency teams to get together…"
- "Knowledge is power, and many people horde information to out-perform coworkers. We need to share knowledge; there is little incentive to help your coworkers, much less other centers…"
- "Stop trying to win all discussions. Work to understand what the other person is saying and work together to a mutual beneficial solution."

Theme #2: Cooperation

Centers should be encouraged to work on projects together, each providing particular expertise and unique talents or sharing knowledge on a common discipline. Recognize that each Center may have strengths and weaknesses that can be overcome by leveraging and cooperating with other Centers. Sharing of knowledge and personnel should be encouraged.

Quotes

- "Call someone at another Center if you need help, and if someone calls you from another Center, do absolutely anything in your power to help them and if your direct supervisor discourages this, go over his head as high as it takes."
- "Admit we are weak in some areas and allow other Centers help in those areas…"

Theme #3: Inter-Agency teams and partnerships

Encourage the formation of more inter-Center teams and the formation of partnerships.

Quotes:

- "Look for opportunities for inter-Center teaming and actively participate by volunteering to travel, even for extended periods."
- "Create multi-Center teams for projects and have the project run by a strong leader out of HQ."

Theme #4: Competition

Eliminate situation where different Centers compete for resources to basically do the same work. Collaborating proposals should be encouraged and should take priority over proposals coming from a single source.

Quotes:

- "Resentment between Centers trickles down from management. Management is in competition for funding and attention. The top-down attitude of team versus competitor is required for One NASA to be successful."
- "Find a way to stop competition for funding…The very basic nature of funding breeds competition and separation. Sharing information and technology could take away your competitive edge in the next round of cuts…"

Theme #5 - Contractor involvement

Ensure that contractors are involved each step of the way. Contractors must be true NASA partners for One NASA to succeed.

Quotes:

- "Eliminate the gaps (social, perceived value, status, etc.) between NASA and contractor employees."
- "Much of the NASA workforce are contractors. Clarify whether we are part of the One NASA or not…"

Sub Category 7: Respect

Definition:

Treating others with respect. It is imperative that we all treat other individuals regardless of organizational affiliation with respect. Employees should not criticize, condemn, or complain at individuals, rather the focus should be a process, issue, or a problem.

Theme #1: Mutual respect

Everyone should be treated with professional courtesy and equal respect whether civil servant or contractor, manager or employee. Refrain from negative/critical behavior towards others and respect dissenting opinions.

Quotes:

- "Be respectful of other Centers and don't put them down."
- "Refrain from making remarks that could influence another person or perpetuate Center divisions. We should all take pride in our collective accomplishments."

Theme #2: Trust

Trust others, give credit where credit is due, and praise success wherever it occurs, not just with you or your Center.

Quotes:

- "Managers should listen and trust their employees."
- "Assume the best when trying to determine the motives for others' actions. Believe that someone else can do the job as well, though they may do it differently."

7. Previous NASA Studies

To understand how previous and current analysis of the NASA culture and climate inform One NASA enablers and disablers.

Process

A sample of studies completed from 1989 to 2002 was analyzed to identify enablers and disablers of One NASA. Each study was reviewed and a list of enablers and disablers was created. Studies were selected based on how well they represented the Agency overall as well as their availability. We also tried to represent studies at a number of different centers. The following were the studies reviewed:

- NASA Culture: 1986 and 1989
- Customer Satisfaction: 1995/1996
- Goddard Culture 1999
- Glenn HR Survey 2002
- LaRC Climate 2001
- NASA Mobility Study
- 540-degree feedback data from Management Education Program and Managing the Influence Process Programs from 1999 to present.

Organization

Detail findings are outlined below by study. Findings are separated into disablers and enablers relevant for One NASA in the following areas:

- Goals and Vision
- Leader Behaviors
- Resources
- Systems and Processes
- Organization/Culture and Values
- Rewards and Recognition
- Communication
- Learning Systems
- Measurement and Reporting.

Key Findings

Probably the most significant finding is that none of the studies we examined focused specifically on creating a One NASA environment. Although many questions focused on collaboration and teamwork within Centers, few even asked about collaboration across NASA—even the culture studies conducted in the late 1980s. The most targeted comments about collaboration across Centers were from the customer satisfaction surveys. Themes included lack of collaboration across Centers and a culture that is not built on trust. Future culture, climate, and other studies MUST measure One NASA climate, culture and practices. Other key themes include:

- Lack of consistent communication and understanding of NASA vision and mission.
- Mixed results about satisfaction with information and knowledge sharing.
- High integrity of people in NASA.
- Collaboration and communication across the organization could be improved.
- Lack of rewards for teamwork and collaboration within and between Centers.
- Need for further mobility of the NASA workforce.

Note: All enablers and disablers were the ones listed relevant to the One NASA effort. For example, if people reported that they were not rewarded adequately, this was not reported in this summary since this statement had little relevance to One NASA.

Study/One NASA Elements	***NASA Culture 1986 and 1989*** * Note that cross-installation cooperation was not explicitly measured in this study.
Goals/Vision	**Disablers:** Lack of clear roles and missions of NASA installations, lack of people willing to share power. Resource acquisition for Center is seen as sign of success. Clear goals of Centers. Authority centralized. **Enablers:** Value high-quality work, loyalty to NASA Goal Achievement.
Leader Behaviors	**Disablers:** Sharing power. Agency-level leadership expected to do the right thing. Senior leader attention needs to focus more on management of people.
Resources	**Disabler:** Acquisition of resources for installation by senior management is viewed as sign of success.
Systems and Processes	
Organizational Values, Culture, Approach	**Disablers:** Lack of respect for diversity. People more loyal to Centers at the expense of the whole. **Enablers:** High integrity of people in NASA.
Rewards and Recognition	
Communication	
Learning Systems	
Measurement and Reporting	

Study/One NASA Elements	*Customer Satisfaction Survey 1996*
Goals/Vision	**Disabler:** Almost 60 percent report that Agency leadership could be more consistent and clear about direction of Agency. **Enabler:** Over 90 percent of respondents had read NASA Agency level strategic plan.
Leader Behaviors	**Disablers:** Agency-level leadership expected to do the right thing.
Resources	
Systems and Processes	**Disabler:** Over 57 percent reported that lack of teamwork among organization units prevents the best customer service. Many reported that overly bureaucratic systems and processes get in the way of customer service.
Organizational Values, Culture, Approach	**Disablers:** Trust within work units below 3.0 on a 5.0 scale—down from 1989. Over 30 percent of respondents report culture does not reward teamwork. Over 55 percent of respondents report that culture is not built on trust. Over 45 percent report that cooperation across organization is not consistent with NASA practices.Over 52 percent of respondents report that it is not characteristic of Centers to work together to accomplish Agency mission. **Enabler:** 61 percent of respondents say culture rewards teamwork.
Rewards and Recognition	
Communication	**Enabler:** Over 90 percent of respondents had read NASA Agency-level strategic plan. About 50 percent satisfied with Agency-level communications.—More satisfied with Agency-level than within work unit communication.
Learning Systems	**Enabler:** Over 55 percent report that their installation is open to new ideas from other installations and HQ.
Measurement and Reporting	

Study/One NASA Elements	*Goddard Culture Study 1999*
Goals/Vision	**Enabler:** Goddard is influenced by NASA's goals and vision was up from previous surveys.
Leader Behaviors	**Enabler:** Center leadership provides a clear vision of how the work contributes to overall NASA mission and strategic objectives.
Resources	
Systems and Processes	**Disabler:** Too many competing initiatives—many from HQ.
Organizational Values, Culture, Approach	**Enabler:** Respondents report that partnering with others to achieve mission success is satisfactory. Respondents report satisfaction with recognition of the importance of teamwork in internal and external teams.
Rewards and Recognition	**Disabler:** Goddard employees report that improvement could be made in rewarding team performance.
Communication	
Learning Systems	**Disabler:** Employees report only moderate satisfaction with fostering an environment that encourages exchange of information and learning from outside Goddard.
Measurement and Reporting	

Study/One NASA Elements	*Glenn HR Study 2002*
Goals/Vision	
Leader Behaviors	**Disabler:** A majority of people reported lower scores for senior managers taking time to talk informally with working groups.
Resources	
Systems and Processes	**Disabler:** About half of employees responded that they were less than satisfied with the clarity of their role and how it relates to the roles of others. **Enabler:** About half of employees responded that they were satisfied with the clarity of their role and how it relates to the roles of others.
Organizational Values, Culture, Approach	**Disabler:** About half of employees responded that they were less than satisfied with cooperation between their groups and other groups (did not mention other Centers). **Enabler:** About half of employees responded that they were satisfied with cooperation between their groups and other groups (did not mention other Centers).
Rewards and Recognition	
Communication	
Learning Systems	**Enabler:** A majority of people responded that they were satisfied with an atmosphere that encourages sharing of information (did not talk about with other Centers).
Measurement and Reporting	

Study/One NASA Elements	*LaRC Climate Study 2001*
Goals/Vision	**Disabler:** Many reported need for commitment of Agency to longer-term goals and objectives. **Enabler:** Langley leadership is responsive to changes at NASA HQ and in the federal environment in general. People responded that changes at Langley are influenced by outside forces.
Leader Behaviors	**Disabler:** People reported wanting more strategic information from senior leaders.
Resources	**Disabler:** More clarity on specific goals and priorities to better manage resources.
Systems and Processes	**Disabler:** One of the lower scoring items was if Langley is well structured to meet its mission—many reported that structure did not facilitate effective working relationships outside of Langley.
Organizational Values, Culture, Approach	**Enablers:** Very positive remarks to forming alliances with industry, academia. Did not focus on other Centers.
Rewards and Recognition	**Disabler:** Career development as a whole scored lower—specifically related to people who are not engineers and scientists.
Communication	**Disablers:** People reported feeling less informed about Agency-level and strategic issues than local Langley issues.
Learning Systems	**Enabler:** People reported high scores for cooperation and support with teammates (did not ask about other Centers).
Measurement and Reporting	

Study/One NASA Elements	*NASA Mobility*
Goals/Vision	
Leader Behaviors	**Disabler:** Lack of movement of leaders across NASA for broadening.
Resources	**Disabler:** Lack of resources for movement.
Systems and Processes	**Disabler:** Lack of systems and process for mobility.
Organizational Values, Culture, Approach	**Disabler:** Culture and history that fosters silos.
Rewards and Recognition	**Disabler:** Lack of reward and recognition for mobility.
Communication	**Disablers:** Lack of visibility for mobility assignments.
Learning Systems	
Measurement and Reporting	

Study/One NASA Elements	*540-degree Assessment Data Themes*
Goals/Vision	**Disablers:** Lack of communication on vision for change.
Leader Behaviors	**Disabler:** Lack of feedback to workforce on performance. Lack of focus on career development and mentoring.
Resources	
Systems and Processes	
Organizational Values, Culture, Approach	**Enabler:** High scores on integrity, honesty.
Rewards and Recognition	**Disabler:** Lack of reward and recognition for mobility.
Communication	
Learning Systems	
Measurement and Reporting	

8. One NASA Linkage Report

There are a number of current Agency-level change activities, plans, and initiatives proceeding in parallel with the One NASA effort. As part of the Phase II Study, these initiatives were examined to determine their potential relationship to One NASA. It is important to understand these relationships to achieve the proper coordination and integration as One NASA moves into Phase III Implementation. To a varying degree, all were found to have aspects that support, impact, or embrace the goals of One NASA. The following paragraphs discuss these findings.

More specifically, a significant number of survey inputs related directly or indirectly to other initiatives. Some of these inputs resulted in the One NASA recommendations enumerated in Volume I. For example, Recommendation 1 (link the work of all employees to the Agency's Vision, Mission and Strategy) supports the current strategic planning process; Recommendation 5 (human resource strategies to broaden perspectives) supports initiatives on workforce mobility and capability development; and Recommendation 6 (tools and business practices) supports Freedom to Manage, Project Management, and the standardization of technical processes.

The paragraphs that follow represent a first step in identifying Agencywide initiatives and their relationship to One NASA. Those involved in these or other initiatives should examine the recommendations in this report and the analysis in this section for the purpose of developing integrated/coordinated implementation planning. This section is also supportive of efforts by the NASA Change Lead to identify and integrate all initiatives with Agencywide change implications.

8.1 Succession Planning and Career Development Initiative

Initiative Description

The purpose of the Succession Planning and Career Development Initiative is to design a robust, Agency-level succession planning and career development program that prepares people for SES status and continues education after a person reaches SES status. The initiative includes mobility, rotations, assignments, education, and planning for replacement. A similar effort is ongoing in Code M also that is focused on mobility.

Key Players

Jim Jennings, Associate Deputy Administrator for Institutions and Assets Management; Chris Williams; Jan Moore, Chief of Professional Development; Erica Vandersand.

Relationship to One NASA

Increasing mobility and general broadening of perspectives is one of the primary recommendations of the One NASA Study. NASA's leadership recognized this early with respect to the top-level reassignments of SES personnel across the Agency and in the SES development program (the SES Candidate Development Program (CDP) has always required candidates to have work assignments beyond their current permanent location).

Opportunities for Future Coordination

During One NASA Implementation—Phase III—coordination designed to accelerate the Agencywide implementation of succession planning, career development, and increased mobility will be performed by the One NASA team with other change and initiative leaders. For the foreseeable future, the principles and goals of "One NASA" should be actively discussed during leader development programs such as MIP, MEP, and SESCDP. Part of SES advancement criteria within NASA should include that the candidate demonstrates the One NASA behaviors.

8.2 SES Leadership Programs

Initiative Description

The purpose of this initiative is to create and conduct courses for the SES population that highlight institutional accountabilities, regulations, and processes. It is comprised of two-day programs.

Key Players

Jim Jennings, Associate Deputy Administrator for Institutions and Assets Management; Jan Moore, Chief of Professional Development, Erika Vandersand.

Relationship to One NASA

One NASA effort will succeed or fail based upon the words and actions of NASA's senior leadership.

Opportunities for Future Coordination

SES development programs should be used as a platform for discussion of common and standard practices and ways of doing business across Centers. It is a very good forum to emphasize, discuss, and develop actions relating to One NASA. As the implementation of One NASA progresses, new course material focusing on One NASA values and behaviors should be added to this program. See the discussion on the One NASA linkage to the Succession Planning and Career Development Initiative (8.1), above.

8.3 Ongoing Dialogue between SESers and NASA Administrator

Initiative Description

Ongoing discussion groups with SESers

Key Players

Sean O'Keefe, Fred Gregory, Courtney Stadd, Glenn Mahone.

Relationship to One NASA

Cultural change will need to fully, actively, visibly, and continuously be supported by NASA leadership.

Opportunities for Future Coordination

The discussion groups can be used to reinforce concepts and accountabilities associated with One NASA. As with the previous item (SES Leadership Programs) this appears to be a very good forum to emphasize, discuss, and develop actions relating to One NASA. Via this forum, the Administrator can relay accountabilities and expectations he has for his leadership group.

8.4 Agency Strategic, Budget, and Performance Planning

Initiative Description

This effort is aligning all strategic, implementation, and performance plans with NASA's Vision, Mission, goals, and objectives as reflected in the 2003 NASA Strategic Plan. The documentation and their relationships are described in Appendix IV of the NASA 2003 Strategic Plan. Enterprise and theme implementation plans will be written/revised to provide more detail as to how the goals and objectives of the Strategic plan will be achieved. NASA Centers will be revising their implementation plans to illustrate how they will support the Enterprises and themes in meeting NASA's Mission and Vision. Part of this revision will be reflecting the elimination of the Lead Center concept in favor of a Program orientation with leadership from HQ.

Key Players

Dr. Michael Greenfield, Associate Deputy Administrator for Technical Programs; Douglas Comstock, Director Strategic Management and Planning; Enterprise AAs; and Center Directors.

Relationship to One NASA

The One NASA Study, and specifically Recommendation 1, found that a better linkage is needed between the work of individual employees and overall Agency goals. This linkage is important to unify individual efforts in support of the Agency mission and goals. Another study finding is that NASA strategic planning should reinforce collaboration across the Agency. The current strategic planning process is designed to achieve both of these recommendations.

Opportunities for Future Coordination

Strategic planning is one of the most important areas to represent the precepts of One NASA. One NASA team members will support NASA's strategic planning activities to ensure that implementation planning supports a cooperative environment across and within enterprises, Centers, programs, and projects. Part of this support will be to communicate to the NASA and contractor workforces how strategic and implementation planning reinforces One NASA principles. One specific implementation task is to explain the concepts of healthy and unhealthy competition between organizations for scarce budget resources.

8.5 Joint Strategic Assessment Committee

Initiative Description

Space Science, Earth Science, Biological and Physical Research, Aeronautics, and Space Flight—as well as those working on interdisciplinary efforts such as space exploration—will report to the Joint Strategic Assessment Committee (JSAC), through the Space Architect, about their activities related to NASA's long-term strategy for aerospace research. The Associate Deputy Administrator/Technical chairs the JSAC.

Key Players

Dr. Michael Greenfield, Associate Deputy Administrator for Technical Programs; Gary Martin, NASA Space Architect.

Relationship to One NASA

The JSAC is in a position to reinforce cross-Agency collaboration within programs and projects. It is also in a position to set standards for healthy competition by contributing to the transparency of decision processes regarding the prioritization of projects and the selection among competing ideas. JSAC members working as a team and individually will need to ensure that their behaviors and decisions reinforce One NASA principles. The JSAC promotes cultural change through modeling One NASA behaviors and values.

Opportunities for Future Coordination

The One NASA Team will work with the JSAC to establish and promote One NASA behaviors and to communicate standards and best practices for collaboration and competition.

8.6 Agencywide IT Initiatives

Initiative Description

Numerous IT initiatives are being led out of the HQ Office of the Chief Information Officer. Among these are the Mission Control Center effort and a common, more centralized IT architecture.

Key Players

Paul Strassman, Acting NASA Chief Information Officer.

Relationship to One NASA

The design and use of common IT systems across NASA is critical to the ability of the Agency to operate as one organization.

Opportunities for Future Coordination

A number of survey inputs dealt with IT changes. The One NASA team will coordinate with the IT organization to assist in implementation planning. It appears from the data that there is a general lack of understanding regarding IT initiatives. There needs to be a significant increase in

explaining and promoting (communication) IT changes that implement One NASA principles (this includes restoring the Agency IT (CIO) Web site at HQ).

8.7 Education Initiative

Initiative Description

This initiative includes the reorganization of NASA's education efforts to better align and integrate with national education goals and with Agency vision and mission.

Key Players

Office of Education (Code N) Associate Administrator, Dr. Adena Williams Loston.

Relationship to One NASA

The initiative is already on the One NASA path by seeking to avoid unnecessary duplication across the Centers, and to coordinate Agencywide activities to ensure that NASA speaks with a single voice. This translates directly into One NASA goals.

Opportunities for Future Coordination

To be determined.

8.8 Freedom to Manage

Initiative Description

Freedom to Manage is an Agencywide effort that seeks to eliminate bureaucracy that inhibits effective business practices. A taskforce looks at items submitted from the NASA workforce and makes recommendations to eliminate unnecessary rules and requirements.

Key Players

Courtney Stadd, Chief of Staff

Relationship to One NASA

The F2M effort focuses on the policy, procedures, rules, and regulations by which NASA functions. One NASA provides a cultural foundation for F2M by promoting behaviors and values that encourage mutual accountability for business and technical results. F2M efforts enhance the success of One NASA, by ensuring that barriers to effective synergism across the Agency are removed/not created. Critical to the One NASA cultural change is the elimination of disablers that have been introduced over time in the ways in which NASA conducts its day-to-day operations.

Opportunities for Future Coordination

One NASA is a tiger team of the F2M Task Force; therefore, One NASA makes periodic reports to F2M, thereby ensuring that the members of the F2M Task Force are continuously reminded of the direct linkage of the two efforts. Also, as a result of the One NASA survey, many of the recommendations fall within the F2M scope, and will be coordinated.

8.9 President's Management Agenda

In August 2001, President Bush launched a Management Reform Agenda targeted to "address the most apparent deficiencies where the opportunity to improve performance is the greatest." The President's Management Council, the Office of Management and Budget, and the Office of Personnel Management developed standards for success in each of the five government-wide initiatives:

1. Strategic Management of Human Capital.
2. Competitive Sourcing.
3. Improved Financial Performance.
4. Expanded Electronic Government.
5. Budget & Performance Integration.

Strategic Management of Human Capital

Initiative Description

This initiative implements the NASA goals associated with the PMA Strategic Management of Human Capital.

Key Players

Vicki A. Novak, Associate Administrator for Human Resources and Education.

Relationship to One NASA

Ultimately, for One NASA to become a reality, it must become second nature to those that do the work of NASA —the NASA workforce.

Opportunities for Future Coordination

For detailed survey results related to this area, look in section 6 of this volume and in section 2 of Volume I under the Human Resources category (recommendation 5).

Competitive Sourcing

Initiative Description

This initiative implements the NASA goals associated with the PMA Competitive Sourcing.

Key Players

Tom Luedtke, Assistant Administrator for Procurement.

Relationship to One NASA

The survey respondents expressed a belief that outsourcing (their words) is being pursued to the detriment of the Agency. They are concerned about the impacts of outsourcing, both to them personally and to the Agency as a whole. As the Agency grapples with the subject of Competitive Sourcing and the FAIR Act, there is the risk that there will be perceptions of imbalances of implementation across the NASA population. If competitive sourcing results in outsourcing, there needs to be a belief that individual populations have been treated equitably.

Opportunities for Future Coordination

A number of survey inputs dealt with Competitive Sourcing. The data reflects a lack of/misinformation regarding competitive sourcing. Certainly the Agency has worked to explain Competitive Sourcing at a high level, but the workforce is concerned with regards to themselves and their business area (implementation level). Future actions should be considered that take into account these concerns.

Improved Financial Performance

Initiative Description

This initiative implements the NASA goals associated with the PMA Improved Financial Performance. These involve the implementation of the IFMP.

Key Players

Mike Mann.

Relationship to One NASA

The IFMP will provide a common financial services and infrastructure across NASA. This will be important operationally as there are more and more cross-Center/ enterprise programs and projects. Ultimately, IFMP will be an enabler of One NASA.

Opportunities for Future Coordination

So many comments were received in the One NASA survey concerning IFMP that it rated its own category within which the detailed results can be examined (Section 6 of Volume II).

Expanded Electronic Government

Initiative Description

This initiative implements the NASA goals associated with the PMA Expanded Electronic Government. These involve the areas of Capital Planning, E-Gov Implementation, and IT Security.

Key Players

Paul Strassman, Acting NASA Chief Information Officer.

Relationship to One NASA

See discussion on IT Initiatives (8.6).

Opportunities for Future Coordination

See discussion on IT Initiatives (8.6).

Budget and Performance Integration

Initiative Description

This initiative implements the NASA goals associated with the PMA Budget and Performance Integration. These involve the areas of Full-Cost and Performance Budgeting. This area includes the Agency-level initiative to capture all costs associated with doing business. In addition, it will facilitate a common management approach to budgeting, project management, and financial accounting and reporting.

Key Players

Steve Isakowitz, Comptroller.

Relationship to One NASA

The NASA workforce appears to recognize this area as necessary, but there is much concern expressed through the survey about how both the individual members of the workforce and their associated business areas may be affected. Those who are not accustomed to working full-time on programs and projects (researchers, infrastructure personnel) expressed the most concern.

Opportunities for Future Coordination

To be determined.

8.10 ISO Certification

Initiative Description

Each Center has now been ISO certified. Part of the F2M effort is examining the emphasis the Agency will place on ISO certification (or something similar) in the future.

Key Players

Fred Gregory, Deputy Administrator; Brian O'Conner, Associate Administrator for Safety and Mission Assurance.

Relationship to One NASA

To the extent that efforts are made to develop common processes applicable across Centers/installations, it will facilitate communication and joint activities throughout the Agency.

Opportunities for Future Coordination

ISO certification was pursued independently at each Center. Consideration should be given to determining which activities need to have common/similar processes and procedures to facilitate communication and joint activities among sites.

8.11 NASA Shared Services Center (NSSC): The Consolidated Business Systems Initiative (Shared Services)

Initiative Description

This initiative is investigating the proposition that a consolidation of business services such as payroll, transactional parts of HR, and other common business functions could increase efficiencies across the agency. The goal is to eliminate redundancies and increase customer satisfaction across centers in business systems and leverage economies of scale.

Key Players

Jim Jennings, Associate Deputy Administrator for Institutions and Assets Management.

Relationship to One NASA

If properly executed, could facilitate business results in terms of One NASA relative to common payroll, transactional HR, and other systems. Probably would not impact culture change.

Opportunities for Future Coordination

To be determined.

8.12 Program/Project Management

Initiative Description

This effort is revisiting 7120 to focus on improved project management, reintroduce a phased approach to project execution, and to address the unique needs of technology and science projects.

Key Players

Liam Sarsfield, Code AE.

Relationship to One NASA

As one of NASA's universal processes, project management must be standardized around a set of requirements that promote efficiency (pragmatic and reasonable) and effectiveness in terms of achieving successful project results. Standardization will promote cross-Agency collaboration, which is a primary goal of One NASA.

Opportunities for Future Coordination

The One NASA team will work with the project management initiative to promote and communicate the importance of project management standardization to One NASA.

Table 6. One NASA Linkage Matrix Summary

MAJOR THEMES:	Responsible NASA Players	Relationship to ONE NASA
1. NASA'S SENIOR LEADERSHIP		
8.1 Succession planning and career development initiative	Jim Jennings, Code AI, William Readdy, Code M Jan Moore and Chris Williams, Code FT	Vision, Mission and Strategy; Leadership; and Human Resources
8.2 SES Leadership Programs	Jim Jennings, Code AI, Jan Moore, Code FT	Leadership; Human Resources; Tools and Business Practices
8.3 Ongoing dialog with SES Cadre	Sean O'Keefe, Code A Fred Gregory, Code A Courtney Stadd, Code A Glenn Mahone, Code P	Vision, Mission and Strategy; Leadership; Organizational Structure; Organizational Culture; Tools and Business Practices
2. STRATEGIC ALIGNMENT		
8.4 Agency Strategic Budget and Performance Planning	Dr. Michael Greenfield, Code AT, Doug Comstock, Code BX	Vision, Mission and Strategy; Tools and Business Practices
8.5 Joint Strategic Assessment Committee (JSAC)	Dr. Michael Greenfield, Code AT, Gary Martin, Space Architect	Vision, Mission and Strategy; Leadership; Tools and Business Practices
8.6 Agency Wide Information Technology Initiatives	Paul Strassman, Code AO	Tools and Business Practices
8.7 Education Initiative	Dr. Adena Williams Loston, Code N	Vision, Mission and Strategy; Leadership; Tools and Business Practices
3. NASA BUSINESS CULTURE		
8.8 Freedom to Manage (F2M)	Courtney Stadd, Code A	Vision, Mission and Strategy; Leadership; Tools and Business Practices
8.9 President's Management Agenda	Dr. Scott Pace, Code A	
8.9.1 Strategic Management of Human Capital	Jim Jennings, Code AI, Vicki Novak, Code F	Vision, Mission and Strategy; Leadership; Human Resources; Tools and Business Practices
8.9.2 Competitive Sourcing	Tom Luedtke, Code H	Human Resources; Tools and Business Practices
8.9.3 Improved Financial Performance	Mike Mann, Code BI	Tools and Business Practices
8.9.4 Expanded Electronic Government	Paul Strassman, Code AO, Chief Information Officer	Tools and Business Practices
8.9.5 Budget and Performance Integration	Steve Isakowitz, Code B	Tools and Business Practices
8.10 ISO Certifications	Fred Gregory, Code A Brian O'Conner, Code Q	Tools and Business Practices
8.11 NASA Shared Services Center	Jim Jennings, Code AI	Tools and Business Practices
8.12 Program/Project Management	Liam Sarsfield, Code AE	Tools and Business Practices